Task Force on Flexible Education

Final Report

August 2015

“Relevance is the goal; flexibility is the enabling strategy; responsiveness is the practice.”
## I. Executive Summary

The Task Force on Flexible Education (TFFE) was proposed by the Vice-President, Academic and Provost (VPA) in January 2014 and approved by Senate in February 2014. Its mandate was to review SFU’s teaching and learning environment in order to identify future needs, define short- and longer-term institutional priorities, and develop a strategic plan for implementing and supporting flexible education at SFU.

Through the TFFE, the VPA wished to consider ways in which the university could respond to the growing diversity of its students and the resulting call for programs that accommodate their varied needs. The VPA provided the TFFE with terms of reference and a set of principles to guide its work as it consulted across the university community. The primary goal of the TFFE was to develop an implementation plan for putting its findings and recommendations into effect, including a resource model which supports the growth and sustainment of flexible education at SFU, and a compilation of examples of effective practice that could be adopted and/or refashioned by SFU to create its flexible learning environments.

Starting in April 2014, the TFFE began its exploration of the dimensions of flexible education at SFU within the context of the SFU Strategic Vision and the Academic Plan. Early in the research process, a review of a small number of key papers and reports produced a list of original themes that were used to guide the team’s early consultations and discussions. Throughout its explorations with the SFU community in spring and summer 2014, the TFFE team was struck by the range and diversity of innovation at SFU, and began to look for broader definitions of flexible education that reflected the types of educational approaches the team was finding in place at SFU.

An October 2014 TFFE committee meeting produced an updated definition of flexible education along with a set of principles that were developed through a strategy and vision process. The term flexible education was seen as an enabling strategy through which SFU could provide added relevance, meaning and real world experiences to its academic programs. The resulting motto guided the task force’s work for the remainder of the project:

“Relevance is the goal; flexibility is the enabling strategy; responsiveness is the practice.”

In January and February 2015, members of the university community were invited to share their thoughts about the directions in which university teaching and learning is—or should be headed—at one of three World Café style consultative events hosted by the TFFE project team. From further explorations and community engagement processes, seven recommendations were made, grouped within five themes.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>DESIGNING ENGAGING AND RESPONSIVE PROGRAMS</td>
<td>R1 Provide opportunities for community engagement or practical experiences within all SFU programs</td>
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<tr>
<td>FOSTERING STUDENT AGENCY</td>
<td>R2 Create a foundational experience in learning for life for all SFU students</td>
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<tr>
<td>CONNECTING TEACHING WITH RESEARCH AND PRACTICE</td>
<td>R3 Use research on teaching and learning to guide, develop and expand innovative teaching and learning practices across SFU</td>
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<td>R4 Provide better professional development opportunities for all instructors</td>
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<td>ENHANCING LEARNING ENVIRONMENTS – BOTH DIGITAL AND PHYSICAL</td>
<td>R5 Proactively research and explore digital learning and teaching systems, and develop and implement a digital infrastructure for the creation and distribution of instructional resources across SFU campuses</td>
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<td>R6 Create renewed spaces for student life and learning across SFU campuses</td>
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<tr>
<td>ALIGNING EDUCATIONAL RESEARCH AND SERVICES FOR THE FUTURE</td>
<td>R7 Appoint a senior administrator to guide and facilitate a strategic approach to learning and teaching across all learning units at SFU</td>
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II. Introduction

The Task Force on Flexible Education (TFFE) was proposed by the Vice-President, Academic (VPA) in January 2014 and approved by Senate in February 2014. Its mandate was to review SFU’s teaching and learning environment in order to identify future needs, define short- and longer-term institutional priorities, and develop a strategic plan for implementing and supporting flexible education at SFU.

Through the TFFE, the VPA wished to consider ways in which the university could respond to the growing diversity of its students and the resulting call for programs that accommodate their varied needs. The VPA also wished to broaden the discussion of flexibility beyond the consideration of online programming and delivery systems and provided scope for the TFFE to consult widely across the university community.

Flexible education encompasses more than technology-enabled learning

There has been considerable discussion in the general and post-secondary media about the potential of various kinds of technology-supported learning. In addition, there is a sizeable academic literature that reports research in this area, and a number of faculty members at SFU contribute to this research. Topics such as MOOCs and flipped classrooms have been discussed.

In 2012 the Vice-President Academic (VPA) created a small working group to review where the university stands in relation to recent developments. The working group produced a report that was then circulated to select Senate committees for comment. The consensus of the feedback was that the first recommendation (see below) of the report should be explored more fully before the university makes any major decisions about the appropriate direction to take, or responds to the more detailed recommendations that were contained in the initial report:

*A university-wide committee appointed by the VPA should be assembled and charged with assessing current online learning resources (for example, support for online teaching practices) and online learning course provisioning across SFU and making recommendations about further strategic development of online resources and programming.*

However, as a result of his own research in this area, the VPA wished to broaden the discussion beyond the consideration of online programming and delivery systems. In particular, he wished to consider ways in which the university can respond to the growing diversity of its students and the resulting call for programs that accommodate their varied needs.

At SFU, for example, 43% of students are classified as EAL (English as an additional language) students, and 55% are employed or self-employed in addition to studying. The implications of these demographic characteristics must be addressed if the university wishes to provide its students (and instructors) with the best chances for success.

Consequently, it was proposed that Senate endorse the establishment of a Task Force on Flexible Education (TFFE), which would ultimately make recommendations on the future directions that the university should take in a number of related areas, including the use of fully online programs and fully online courses; access to courses and programs outside of the traditional semester timing (learn at your own speed); the integration of digital resources and other media into more traditional learning environments (e.g., flipped classrooms, virtual labs); and appropriate administrative and budget processes to provide support to students and instructors.

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The TFFE History and Mission

View the TFFE Chair, Dr. Bill Krane

Dr. Bill Krane, Task Force Chair, described the TFFE mission in May 27, 2014.

*The TFFE will take a holistic view of SFU’s teaching and learning environment.*

Almost 50 years ago Simon Fraser University, dubbed BC’s “instant university,” began offering a distinctive learning experience to its students. Underpinning its unique suite of initial programs was the trimester system, which allowed students to attend classes year round if they wished, or space their programs over a longer period than the four-year norm. This flexibility became a hallmark of the SFU educational experience and attracted many students who either wanted to study part-time or whose circumstances required them to combine work and study.

During this nascent period, SFU also became known for its innovative use of technology in the classroom. For example, the seats in some lecture theatres were equipped with keypads through which students could respond to questions posed by their instructor who could tally and display the results instantly for analysis and discussion.

SFU has been a leader in online and distance education for decades. Online technologies are now routinely used in classroom-based courses to provide a “blended” learning experience for students and flexibility around the delivery of curriculum. A new, highly customizable, learning management system (Canvas) was recently implemented to enhance the student experience and support faculty innovation in this area.

The interest in technology-enabled learning and alternative pedagogies, such as flipped classrooms, has been intensifying. As SFU approaches its 50th anniversary celebration it is fitting that we undertake a comprehensive review of our present teaching and learning environment, identify future needs, define short- and longer-term institutional priorities, and develop a strategic plan for implementing and supporting flexible education at SFU. This is the work of the Task Force on Flexible Education (TFFE).

The TFFE will take a holistic view of SFU’s teaching and learning environment. In addition to exploring the pedagogical landscape, SFU’s instructional infrastructure, both physical and virtual, will be scrutinized. Support systems will be reviewed to ensure that students and instructors enjoy the highest levels of service possible. The process will be highly consultative. The TFFE, aided by a highly skilled project team, will rely on surveys, interviews, focus groups, town hall meetings, and working groups on selected topics to solicit input and opinions. The timeline is aggressive. Final recommendations will be delivered to the Vice-President, Academic by June 2015.

Terms of Reference and Guiding Principles for the TFFE

The VPA provided the TFFE with terms of reference and a set of principles to guide its work as it consulted across the university community.

**Terms of reference**

1. Engage in a broad consultation with the university community on the objectives for and issues concerning the development of flexible learning environments
2. Perform an environmental scan of trends and directions in flexible learning being used at other post-secondary institutions
3. Identify effective and leading-edge practices by referring to the academic literature and efforts undertaken at other institutions
4. Produce an inventory of institutionally supported technologies and units at SFU that support credit and non-credit programs
5. Rely on the investigative work carried out in 1 through 4 to establish thematic working groups consisting of members of the university community with appropriate expertise that would explore various aspects of flexible learning and develop recommendations on an institutional strategy for flexible education at SFU.

6. Develop an implementation plan for putting the recommendations into effect, including a) a resource model which supports the growth and sustainment of flexible education at SFU and b) a compilation of examples of effective practice that could be adopted and/or refashioned by SFU to create its flexible learning environments.

**Principles that guided the TFFE’s work in the context of teaching and learning at SFU**

- Create high-quality learning environments and experiences for students and instructors
- Mobilize interest and leverage expertise from the university community, including students, instructors, and professional staff
- Engage in broad, inclusive consultations and communications in all phases of the TFFE’s work: information gathering, identifying issues and approaches, and soliciting feedback on draft recommendations
- Capitalize on efforts of other task forces and working groups to date and the expertise of existing support units (Task Force on Teaching and Learning; Experiential Learning; Health Promotion; TLC, CODE, ISTLD)

**TFFE members**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Bill Krane (Chair)</td>
<td>Special Advisor to VP Academic and Provost Office of the VPA</td>
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<tr>
<td>Pat Hibbitts</td>
<td>VP Finance and Administration</td>
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<tr>
<td>Stephanie Chu (non-voting)</td>
<td>Director, Teaching and Learning Centre</td>
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<tr>
<td>John Craig</td>
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<td>Mary-Ellen Kelm</td>
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<td>Kris Magnusson</td>
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<td>Testicca Truong</td>
<td>Undergraduate Student, Environmental Science</td>
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<td>Larry White</td>
<td>Director, Non-Credit Programs, Lifelong Learning</td>
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<tr>
<td>Alyssa Wise</td>
<td>Associate Professor, Education</td>
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<tr>
<td>Brad Burfield</td>
<td>Interim Chief Information Officer</td>
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**TFFE Project Staff**

- David Porter, Project Manager
- Michelle Lowe, Project Coordinator
- Sherrie Atwood, Research Analyst (April – August 2014)
- Candy Ho, Research, Analyst (April – December 2014)
- Gee Lam, Research Analyst (April – August 2014)
What is Flexible Education?

Starting in April 2014, the TFFE began its exploration of the dimensions of flexible education at SFU within the context of the SFU Strategic Vision and the Academic Plan.

The project team began with an initial literature review that included 72 research papers, strategic plans and institutional reports from the past five years. This review took place during the April–August 2014 time period. All papers were summarized and coded using qualitative analysis software. Early in the research process, a review of a small number of key papers and reports produced a list of original themes that were used to guide the team’s early consultations and discussions. After a thorough qualitative analysis of a broad range of sources, the project team formed a more detailed list of themes to guide its consultation. These are found in Appendix B.

Throughout the explorations with the SFU community in spring 2014 and summer 2014, the TFFE team was struck by the range and diversity of innovation at SFU, and so it began to look for broader definitions of flexible education that reflected the types of educational approaches the team was finding in place at SFU. As a consequence, this report emphasizes that flexible education is about much more than “technology-enabled learning.” The intention is to support an environment across the university in which instructors and academic units can deliver learning experiences that respond to student needs in creative and innovative ways.

In the context of “flexible education,” the TFFE team was also drawn to future-oriented opportunities outlined in a 2013 report prepared for the Higher Education Academy (HEA) in the UK. In Flexible Pedagogies: New Pedagogical Ideas Preparing for the Future (Ryan and Tilbury, 2013), the authors identified “six pedagogical ideas that have cross-cutting significance for learning and teaching in the future of flexible higher education.” The ideas were chosen for their potential to shape key attributes for higher education graduates and to inform future practice across the curriculum (The Guardian, 2014, p.1), and are noted in the table that follows.

The six cross-cutting pedagogical ideas in the table below, adapted from Ryan and Tilbury (2013), were also reflected in explorations with the SFU community and in the rationale for recommendations contained in this report.

<table>
<thead>
<tr>
<th>LEARNER EMPOWERMENT</th>
<th>FUTURE-FACING EDUCATION</th>
<th>DECOLONIZING EDUCATION</th>
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<tr>
<td>Actively involving students in learning development and processes of co-creation</td>
<td>Enabling people to think critically, creatively and flexibly to generate alternative visions of the future</td>
<td>Extending intercultural understanding and experiences of students so they can be sensitive to global ways of working</td>
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<td>TRANSFORMATIVE CAPABILITIES</td>
<td>CROSSING BOUNDARIES</td>
<td>SOCIAL LEARNING</td>
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<td>Seeing capabilities not just as abilities but being able to adapt a skill to be used in both familiar and unfamiliar circumstances</td>
<td>Supporting interdisciplinary, inter-professional and cross-sector learning</td>
<td>Developing cultures and environments for learning that harness the emancipatory power of spaces and interactions outside the formal curriculum, particularly through the use of new technologies and co-curricular activities</td>
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III. The Themes and Recommendations

Over the past 12 months, TFFE members and the TFFE project team have been engaged in a highly consultative process to gather information and feedback on aspects of flexible education from across the university community (See Appendix A for a full breakdown of TFFE activities).

Throughout the community engagement processes, in meetings with students, instructors, and with program and service groups, ideas were proposed about how the university could move forward with educational programs and services that reflected the TFFE mantra:

“Relevance is the goal; flexibility is the enabling strategy; responsiveness is the practice.”

What follows are a set of recommendations and action opportunities congruent with the themes the TFFE has identified through its research, and through conversations and community engagement processes across SFU.

Designing Engaging and Responsive Academic Programs

While conducting research and community outreach, a theme that was often raised through discussions about relevance was the importance of linking research and theoretical knowledge learned in classrooms, with practice. SFU has a long history of experiential education that spans a variety of programs and services (Appendix J), and has the opportunity build on this strength moving forward.

Both TFFE Committee members and staff and faculty participants in the World Café sessions echoed the importance of practical, active-learning experiences as part of an SFU degree. In the strategy session in October 2014, TFFE members highlighted key principles of interdisciplinarity, relevance, and output-based degrees as critical components of an SFU education (See Appendix A, p. 20). Further discussions at the World Café sessions prompted questions about SFU’s unique value and strengths at a time when so much learning now takes place online and in the workplace. One area where SFU might set itself apart from other universities is in the area of experiential education. Congruent with SFU’s Vision to be Canada’s most engaged university, SFU can utilize community partnerships and relationships with the corporate community to engage its students in active, hands-on learning.

Other universities are pursuing a similar strategy. An example is Cornell University that has initiated its "Engaged Cornell" vision, with a goal to build community-engaged learning into 100% of students’ programs by 2025 (See Appendix C). Cornell University states four main benefits of community-engaged learning:

• Build collaboration with diverse stakeholders, through organized service activities in specific community contexts, to address social problems and issues
• Integrate theory with practice
• Engage in active, reflective learning
• Gain knowledge and skills in academic disciplines while advancing personal, professional, and social development

Students are also keen to participate in experiential and hands-on activities, and to demonstrate the value of their education to the community. Overwhelmingly, when asked to define a relevant education, students voiced their desire to see research and theory learned in the classroom tied to the real world through practical projects and experiences (Appendix F). Although students acknowledged the value of building key skills in critical thinking, communication, and research, they also expressed concerns about their ability to find post-graduation employment. Lack of knowledge of appropriate career-paths for their disciplines, and an inability to communicate the value of their classroom learning to potential employers were key concerns.
Finally, the results SFU’s undergraduate student surveys from 2011 through 2013 (Appendix G) noted that the majority of respondents listed getting a good job and training for a career as the main goals for their education.

**Recommendation 1: Provide opportunities for community engagement or practical experiences within all SFU programs**

- Be bold in incorporating experiential learning into university programs through capstone projects, community-based courses, team-based action projects, and other forms of active learning. Make these learning experiences a fundamental component of “an SFU education.”
- Invest in and expand community-engaged interdisciplinary courses and/or programs like City Studio, Semester in Dialogue, Change Lab, and other programs that seek to use the community as a lab for research and learning.
  - Learn from these programs. Apply the principles of community-engaged programming across SFU.
- Investigate e-portfolio systems and/or Internet portfolio strategies as an outlet for students to display discipline-specific professional knowledge and experiences (e.g., PUB 101 – SFU Publishing Program).
  - Investigate authenticated open badging systems as a way to recognize service learning, community projects, co-curricular activities that demonstrate practical skills obtained at SFU in addition to academic courses that appear on students’ transcripts.
- Establish sustainable processes and incentives for program areas and faculty to incorporate practical experiences and/or community engagement activities into learning experiences.

**Challenges addressed**

- Build on existing “flexible” initiatives, in part by sharing more widely, current achievements and exemplary models of practice from across the SFU community.
- Encourage and support inter-disciplinary work and provide budgetary incentives for faculty members to undertake such activities.
- Address the needs of students who may require a more modularized course structure, as well as flexible scheduling and delivery.
- Build on the recommendations from the Furthering Experiential Education at SFU report (2013) about integrated experiential programming (Appendix J).

**Proposed action strategies**

- Use existing flexible curricular mechanisms like Directed Studies and Special Topics courses to pilot and study new curricular experiences. Consider institutionalizing models of practice or special topics that emerge from successful pilot projects by making them permanent topics for support with faculties and departments.
- Research, pilot, and evaluate flexible program pathways or program design models within disciplines, such as “block-based” program models similar to the Quest University design.
- Explore flexible administrative structures to facilitate new approaches to course structure, scheduling, and length to support a variety of teaching and learning strategies.
• Make a commitment to experiential education with targeted financial support. Continue to invest in teaching and learning grants through the Teaching and Learning Centre, or through a supplemental innovation fund focused on expanding experiential learning and exploring program designs that seek to use community as a lab for research, learning, and teaching. See also, King (2015).

• Research, select and implement e-portfolio systems to support experiential and service learning initiatives for students. The PUB 101 model exists as one example at SFU that uses a student-managed Internet domain as the student’s portfolio. See also, McMaster University (2013) and University of Saskatchewan (2015).

Fostering Student Agency

Another key theme raised by the TFFE Committee was the importance of a learning-centred environment at SFU where students feel in control of their learning, and feel empowered and confident in both their academic and career decision-making. However, some students in focus groups admitted to feeling overwhelmed and unsure of their direction throughout the duration of their programs, and therefore had difficulty making sound decisions. They admitted to often being unaware of the choices and options available to them in terms of university support services, as well as how their program and courses would translate into post-graduate employment (Appendix F).

SFU currently has a number of excellent programs that serve students and provide support and skills in a number of non-academic areas (e.g. Library services, Student-Learning Commons, Career Services, Health and Counseling, Centre for Students with Disabilities, Indigenous Student Services, International Services for Students). Students may benefit from a program model that incorporates many of these services into a concentrated foundational experience. Other universities, as well as faculties within SFU, are already moving in this direction (e.g. UBC’s Art’s One program, and the Beedie Business Foundation Program). Additionally, the Academic Plan for 2013–2018 notes that, “universities are expected to provide greater support for students, not just in academic areas, but also in relation to personal or societal factors that may impede student access and success. At SFU, we also have the challenge of meeting the expectations of an especially diverse student population.”

A foundational experience in learning for life could build on current work carried out by SFU’s Health Promotion team to “foster students who are not just educated, but are resilient, creative, collaborative and engaged citizens (SFU Health Promotion, 2013). Students have told the TFFE project team that mentorship with senior students, and the building of a sense of community with peers, help create a social learning support system through which students can grow and develop personally, professionally and academically.

Students in focus groups expressed anxiety in regard to decision making at key transition points in their educational program (e.g., committing to a major, choosing a career path), and they expressed a strong desire for additional support and communication from SFU staff in all stages of their educational journey. They were complimentary of many of the SFU services offered, however, voiced a fear of asking for help, and some difficulty in obtaining help and services from their departments (Appendix F).
**Recommendation 2: Create a foundational experience in learning for life for all SFU students**

- Introduce a foundational experience in learning for life for all SFU students (faculty or discipline specific, or interdisciplinary) that prepare students for life, learning, and work challenges – consider a cohort model.
  - Build on a model such as the Business Foundation Program (Beedie School of Business), University 101 program, and make the program discipline-specific. See also, University 100, UPEI (2015)
  - Topics could include learning skills, study skills, teamwork, presentation skills, research and writing, critical thinking methods, assessment of scholarly materials, and other related skills of the discipline
  - Introduce alumni and typical career paths in discipline-specific or professional programs for students
- Establish a first-year learning community model with proactive advising to support students transitioning from secondary education to the university environment.
  - Provide an intentional transition and a first-year orientation program that communicates information about services, support systems and advising functions within departments and across the university
  - The Library and Student Services should be actively involved in the planned first-year learning community, leveraging existing curriculum on study skills, time management, reading for university courses, and other topics.
  - Introduce a proactive advising model that could include required advising for all first and second-year students

**Challenges addressed**

- Students expressed a desire to feel supported, and be a part of a community. They highlighted first-year learning communities where the staff knew their names as positive examples of practice. This theme also extended into the classroom where students valued instructors who were both passionate about the subject area, and about their students.
- Communication of services and support available on and off-campus conducted in a targeted and discipline-specific manner
- Ease student stress and anxiety
- Address students’ desire for marketable skills by being more explicit about how the strengths of a university education—including critical thinking, literacy, citizenship and writing skills – deliver what students will need to succeed in future endeavors
- Help students to make connections with peers in their discipline outside of the traditional classroom

**Proposed action strategies**

- Provide innovation grants for faculties and departments to design discipline-specific foundational experiences
  - Invest in the design of prototype or pilot foundational experiences for students in specific disciplines
- Increase advising options and availability – preferably earlier in the degree process. Faculty and staff should be part of the student’s experience from orientation program onward.
- Increase the level of department-specific career advising; integrate it as part of the program so that students can become more aware of career options available to them, and have a deeper understanding of how the knowledge and skills they are building in the classroom are valued by employers.
Reinforcing Connections Between Research, Teaching and Practice

Echoing findings from the Task Force on Teaching and Learning, faculty survey responses highlighted an insufficient focus on teaching excellence and teaching innovation, particularly with regard to tenure and promotion (Appendix H). Further, a significant number of respondents to the TFFE faculty survey were sessional instructors who expressed a strong desire to experiment with teaching methodology, but suffered from lack of resources and support.

Student feedback on teaching methods and their classroom experience was mostly positive. One area where students expressed a desire for change was the provision of more project-oriented curriculum earlier in their degree programs. Students also expressed a strong desire to become involved in research much earlier in their educational careers (Appendix F).

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<th>Recommendation 3: Use research on teaching and learning to guide, develop and expand innovative teaching and learning practices across SFU</th>
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<td>• Use expertise from the Institute for the Study of Teaching and Learning in the Disciplines (ISTLD) and the Teaching and Learning Centre (TLC) to guide and implement effective teaching and learning practices.</td>
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<tr>
<td>• Provide discipline-based opportunities for scholarly approaches to teaching and continue to invest in training support for faculty and instructors to acquire new teaching skills appropriate for their discipline.</td>
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<td>• Maintain currency in research on learning in general, and in higher education settings in particular, to guide and implement effective teaching and learning practices. Capitalize on internal expertise across campus in academic departments, and units such as CELLTR, Health and Counselling Services etc.</td>
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<tr>
<td>• Invest in grants that enable faculty to incorporate their research into teaching resources.</td>
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<td>• Support dialogue and networks within and across disciplines within and beyond SFU.</td>
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<td>• Develop and implement a plan to recognize, celebrate, and support flexible teaching strategies and innovation across all three SFU campuses.</td>
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<td>• Involve students more directly in research, and the design and delivery of teaching and learning</td>
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<td>o Engage students with in-class research projects beginning in first-year programs.</td>
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<td>o Provide opportunities for co-research or co-creation of learning resources – e.g. ChemWiki (UC Davis)</td>
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Challenges addressed

• The SFU Teaching and Learning Development Grants program has already made a significant contribution connecting teaching, research and practice, with over 140 Teaching and Learning Development grants funded to date (84 completed with final reports, the rest currently being conducted). ISTLD is currently conducting a formal evaluation of the grants programs and has data that demonstrates the different ways in which this program is effective in enhancing teaching and learning.

• Throughout its work, the TFFE project team found a wide variety of innovative and flexible practices occurring around campus. Exemplars of innovative practice at SFU are highlighted in Appendix I. In addition, the TLC has been proactive in communicating and organizing teaching events across SFU campuses and these practices could be expanded for greater impact.
Proposed action strategies

- Continue to invest in the SFU Teaching and Learning Development Grants program facilitated by the ISTLD in partnership with the TLC, for inquiry into discipline-focused teaching and learning.
- Expand the SFU EdMedia Protégé Program to involve additional faculty across discipline areas and invest in instructional development centres (“makerspaces”) across campus for faculty and instructors to use for designing and testing innovative approaches to teaching and learning with their students.
- Continue to support partnerships between the TLC and other units (ISTLD, CELLTR, Health and Counseling Services, academic departments, BC-TLC, etc.) to connect faculty within and beyond SFU such as through inquiry circles and dialogues and raise awareness of inquiry and research related to teaching and learning.
- Explore mechanisms by which research on teaching and learning can guide, develop, and expand innovative teaching and learning practices across the university.

Recommendation 4: Provide better professional development opportunities for all instructors

- Building on the recommendations from the Task Force on Teaching and Learning, better support and more opportunities for development should be made available to all instructors, including those who are not tenure-track professors or continuing lecturers (e.g., limited term lecturers and professors, professors of professional practice, clinical professors, sessional instructors, post-doctoral fellows, research associates, TAs, and TMs).

Challenges addressed

- Sessional instructors teach many of the introductory or lower division courses that might benefit from renewed or innovative teaching methods.
- Experimentation and innovation in teaching may result in lower teaching evaluations; this is a particular concern in units where student evaluations are the main or only measure of teaching success (Task Force on Teaching and Learning, 2010). Some exemption from evaluation should be considered during terms where new teaching practices are being explored.
- See also, Vajoczki et al. (2011), Teaching-Stream Faculty in Ontario Universities.

Proposed action strategies

- Open up grant programs to a broader range of instructors.
- Offer all instructors training programs, networking, and other professional development that would allow them more opportunities to be experimental and innovative in their teaching.
Enhancing Learning Environments – Both Digital and Physical

Digital environments

As a part of its community engagement process, the TFFE was asked to consider the use of fully online programs and fully online courses, access to courses and programs outside of the traditional semester timing (learn at your own speed), and the integration of digital resources and other media into more traditional learning environments (e.g., flipped classrooms, virtual labs). However, the TFFE chose to focus its attention more broadly than a technological approach to enabling flexibility across SFU by exploring program design, student agency, and the linkages between research, teaching, and learning.

The successful implementation of the Canvas learning management system (LMS) across SFU campuses has demonstrated the university’s ability to deploy large-scale online learning systems. Departments are actively experimenting with online portfolio systems, custom learning management systems, and other strategies that explore the dimensions of flexibility (time, delivery and logistics, program pathways, instructional approaches, and digital content and instructional resources). There is indeed further opportunity for SFU to explore flexible options.

Changes are also taking place in the existing educational resource marketplace as new business and technology strategies emerge. Publishers have created their own learning resource delivery systems, usually based on US servers, to which students gain access directly using purchased codes. E-books and e-readers are also available for mobile phones and tablets. Open textbooks are available to instructors under an open-source license and provide free digital access to learning resources, with low cost printing and customization opportunities. The implications of these technological developments include changing practices for bookstores (Roach, 2014), and a need to harness digital technology more effectively in teaching and learning at SFU to benefit both students and instructors. The SFU Student Society has been active in promoting open textbooks and open educational resources with the student body.

Recommendation 5: Proactively research and explore digital learning and teaching systems, and develop and implement a digital infrastructure for the creation and distribution of instructional resources across SFU campuses

| • Support a proactive experimental approach to exploring a variety of online options for all SFU programs and courses with a view to actualizing the principles of flexibility and responsiveness for all SFU students. |
| • Design, evaluate and implement a digital infrastructure for learning resources at SFU that integrates faculty and library resources, open textbooks and open educational resources (OER), and publisher provided resources. |
| o A concept has been outlined in discussion paper created by the TFFE project team in Appendix P. |
| o A pilot project is being planned for summer semester 2015 |
| • Involve students more directly in the design and delivery of teaching and learning |
| o Provide opportunities for student input into researching alternative learning resources for courses |

Challenges addressed

| • Undergraduate student survey and focus group data reflect student willingness to take courses in multiple formats, hybrid or online courses that would support access, choice and flexibility for academic programs across SFU. |
| • Students are looking for less expensive and more efficient access to learning resources. This is both an access and affordability issue for students. |
Proposed action strategies

- Provide incentives for faculty to develop, pilot, and test blended and online learning courses.
- Invest in Open educational Resource Grants as proposed by the SFU Library and TLC, for adoption, adaptation or creation of open textbooks and/or OER (Appendix M)
- Invest in student co-op or RA positions to support faculty in creating, developing or updating course materials. See Bates case study from UBC (2015).

Physical environments

Early in the community engagement process, the TFFE hosted Dr. Peter Jamieson of the University of Melbourne (Australia) who spoke at SFU about “Pedagogy in Place” in The Learning Hub, in the Faculty of Education. His presentation, the first public event organized by the Task Force on Flexible Education, was provocative in the best sense of the word. Jamieson’s research focuses on how physical environments affect learning. (Appendix I)

In his remarks to a diverse group of SFU faculty and staff he advocated fundamental changes to the design of learning spaces inside and outside the classroom—all with the goal of facilitating more active and effective forms of teaching and learning. Jamieson noted that work in learning space renewal was happening at SFU and encouraged the University community to continually reassess and reinvigorate learning and teaching spaces.

Recommendation 6: Create renewed spaces for student life and learning across SFU campuses

- Use the Faculty of Education’s Learning Hub design to inform renovations within departments and in common areas across SFU campuses.
  o Flexible, moveable, modular furniture of varying heights and shapes allow for easy reconfiguration by students and study groups. Good lighting, sound dampening, semi-private spaces and access to display monitors allow for group activities.
- The libraries at all three campuses provide the most heavily used common student spaces at SFU. The Library and the university have already invested heavily in the renovation, rewiring, and refresh of these student study spaces.
  o Other opportunities for renewed physical learning spaces exist across SFU campuses – consult with students, faculty and departments to identify opportunities for reinvigorating learning and teaching spaces.
- Invest in the renewal of campus gathering spaces.
  o Introduce a campus “greening” and clean up program in outdoor spaces to make them more attractive to students and to encourage students and instructors to use outdoor, covered meeting and study spaces when desired.

Challenges addressed

- Undergraduate student survey data indicates a student desire to be part of campus and campus experience that includes convivial spaces for campus life and study.

Proposed action strategies

- Support the work of a Learning Spaces Renewal committee and provide additional investment and support for projects for physical spaces across campuses to make them more comfortable and conducive to studying – additional electrical outlets to charge devices, new furniture, better lighting, more maintenance, etc. See also, JISC (2006), Designing spaces for effective learning - a guide to 21st century learning design.
Aligning Educational Research and Service for the Future

Universities and institutions across Canada are recognizing that learning and teaching in 2015 involves a continuum of practices that span all delivery modalities: face-to-face, blended, and online learning. Institutions are aligning the capabilities of their teaching and learning and related research units to capture synergies. Examples include the University of Calgary, Carleton University, University of Ottawa, and BCIT.

Ongoing focus on innovative practices and support for future initiatives is required, if SFU is committed to an ongoing approach to maintaining an effective teaching and learning environment supported by responsive and flexible practices. Task Force members noted:

“The meaning of relevance is constantly evolving. The primary role of the Task Force is not to define relevance for today, but to help create an environment that empowers and encourages the academic community to respond nimbly to changing needs and opportunities tomorrow and the day after.” – from TFFE strategy and vision session, October 2014

**Recommendation 7:** Appoint a senior administrator to guide and facilitate a strategic approach to teaching and learning across all learning units at SFU

<table>
<thead>
<tr>
<th>The university needs an organizational structure in place that can help lead us forward in a responsive manner and ensures that there is focus on innovation and maintaining relevance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Create an Associate Vice-President, Teaching and Learning position to guide the research priorities and service operations of the units such as TLC, CODE and ISTLD that have the expertise to support a flexible education strategy across SFU.</td>
</tr>
<tr>
<td>• Bridge to the AVP Teaching and Learning position by extending the TFFE work guided by a Special Advisor or Project Manager, reporting to the AVP Teaching and Learning (or VP Academic and Provost in the interim).</td>
</tr>
<tr>
<td>• Explore a matrix management model across teaching and learning service units, informed by research, to enable synergies. A matrix model would allow a project-based approach to providing educational services across the university. Such a model would allow for a basis for action driven by research, coupled with the deployment of specific skills and experiences of staff members to support a range of learning design needs.</td>
</tr>
</tbody>
</table>

**Challenges addressed**

• Provide strategic support for future initiatives
• Ensure that teaching and learning is supported and led by informed research and practice
• Conduct further research into the efficacy of online teaching for SFU
• Encourage more faculty to become involved in projects that seek to test the opportunities afforded by online and flexible approaches to teaching and learning
• Design, build, market and implement an SFU MOOC to demonstrate the University’s capabilities

**Proposed action strategies**

• Create an Associate VP Teaching and Learning job description and post the position in spring 2016
• Appoint a Special Advisor or Project Manager to the VPA to guide project the work of the TFFE in the interim
• Continue the TFFE Project Coordinator position, along with any required research assistants, to maintain project momentum and to manage pilot projects that are initiated as an outcome of the TFFE report

III. Summary of General Benefits of a Flexible Education Strategy for SFU

<table>
<thead>
<tr>
<th>Group</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Students</td>
<td>• Integrated research, teaching and experiential learning opportunities</td>
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<td></td>
<td>• Quality instruction and learning opportunities driven by research and</td>
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<td></td>
<td>innovative practice</td>
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<td></td>
<td>• Teaching that takes into account changing student needs and aspirations</td>
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<tr>
<td></td>
<td>• A learning environment that is conducive to academic life and study</td>
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<tr>
<td></td>
<td>requirements</td>
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<tr>
<td>Faculty and Instructors</td>
<td>• Ongoing professional development opportunities</td>
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<td></td>
<td>• Incentives and grant programs for teaching excellence and innovation</td>
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<td></td>
<td>• Increased opportunities to bring research into teaching</td>
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<td></td>
<td>• Discipline-specific, in-house support and mentorship opportunities</td>
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<td></td>
<td>• Supported piloting of alternative teaching approaches and innovative</td>
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<td></td>
<td>practice models</td>
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<td></td>
<td>• Opportunities for interdisciplinary interactions with students and</td>
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<td></td>
<td>colleagues</td>
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<tr>
<td>Educational and Support Staff</td>
<td>• Recognition of the integration and research and support service as a</td>
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<tr>
<td></td>
<td>key component within a teaching and learning support system</td>
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<td></td>
<td>• Coordinated priorities and efforts in providing support across the</td>
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<tr>
<td></td>
<td>university – guided by a new key position within the University through</td>
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<td></td>
<td>an Associate Vice-President of Teaching and Learning</td>
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<tr>
<td>Administrators</td>
<td>• Better alignment and support of teaching and learning research and</td>
</tr>
<tr>
<td></td>
<td>support services across SFU initiatives</td>
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<tr>
<td></td>
<td>• Clearer expectations for collaboration between Teaching and Learning</td>
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<tr>
<td></td>
<td>Centre (TLC), Centre for Online Learning (CODE), and research provided</td>
</tr>
<tr>
<td></td>
<td>by the Institute for the Study of Teaching and Learning in the Disciplines (ISTLD)</td>
</tr>
<tr>
<td></td>
<td>• Framework for a flexible education system that recognizes, supports</td>
</tr>
<tr>
<td></td>
<td>and rewards Teaching and Learning across Faculties and at all levels</td>
</tr>
<tr>
<td>The University Community</td>
<td>• Shared vision, direction and common purpose around a flexible approach</td>
</tr>
<tr>
<td></td>
<td>to teaching and learning that define an SFU approach</td>
</tr>
<tr>
<td></td>
<td>• Visible recognition and rewarding of teachers and learners</td>
</tr>
<tr>
<td></td>
<td>• Increased awareness of available supports and support systems for</td>
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<tr>
<td></td>
<td>learners and instructors</td>
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<tr>
<td></td>
<td>• Steps towards recognizing all stakeholder roles and enabling a</td>
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<tr>
<td></td>
<td>community around a responsive approach to teaching and learning at</td>
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<tr>
<td></td>
<td>SFU</td>
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</tbody>
</table>
## IV. Proposed Actions and Timelines

<table>
<thead>
<tr>
<th>Themes</th>
<th>Recommendations</th>
<th>Potential action pathways</th>
<th>Suggested timeframe for action</th>
<th>Estimate of resource requirements</th>
</tr>
</thead>
</table>
| Designing Engaging and Responsive Academic Programs | R1. Provide opportunities for community engagement or practical experiences within all SFU programs | Use existing flexible curricular mechanisms like Directed Studies and Special Topics courses to pilot and study new curricular experiences. Make a commitment to experiential education with targeted financial support. Invest in teaching and learning grants through the Teaching and Learning Centre, or through a supplemental innovation fund focused on expanding experiential learning and exploring program designs that seek to use community as a lab for learning. | Fall 2015 – June 2016  
These recommendations should be considered “targeted” areas for grant funding in 2015-16 through TLC and ISTLD grant programs. | Additional “innovation” funds may be required to supplement existing funds ~ $50-100K  
Consider supplementing existing TLC and ISTLD grant funds with the addition of an innovation envelope targeted at the expansion or the scalability of experiential learning programs |
| Fostering Student Agency            | R2. Create a foundational experience in learning for life for all SFU students                   | Invest in the design of prototype or pilot foundational experiences for students in specific disciplines.  
Increase advising options and availability – preferably earlier in their degree. Faculty and staff should be part of the student’s experience from orientation program onward.  
Increase the level of department-specific career advising; integrate it as part of the program so that students can become more aware of career options available to them, and have a deeper understanding of how the knowledge and skills they are building in the classroom are valued by employers. | This recommendation will require action by a working group that includes representation from Faculties, Student Services, and other service units of the University | Meeting time of participants  
Small budget to convene meetings and focus groups - $15K |
<table>
<thead>
<tr>
<th>Themes</th>
<th>Recommendations</th>
<th>Potential action pathways</th>
<th>Suggested timeframe for action</th>
<th>Estimate of resource requirements</th>
</tr>
</thead>
</table>
| Reinforcing the Connections Between Research, Teaching and Practice | R3. Use research on teaching and learning to guide, develop and expand innovative teaching and learning practices across SFU  
R4. Provide better professional development opportunities for all instructors | Use expertise from the Institute for the Study of Teaching and Learning in the Disciplines (ISTLD) and the Teaching and Learning Centre (TLC) to guide and support effective teaching and learning practices  
Continue to invest in the SFU Teaching and Learning Development Grants program facilitated by the ISTLD in partnership with the TLC for inquiry into discipline-focused teaching and learning.  
Convene a working group of instructors and administrators to explore options for expansion of professional development programs. | Continues, with annual reports and research outputs | Existing grant program funds of TLC and ISTLD |
| Enhancing Learning Environments – Both Digital and Physical | R5. Proactively research and explore digital learning and teaching systems, and develop and implement a digital infrastructure for the creation and distribution of instructional resources across SFU campuses  
R6. Create renewed spaces for student life and learning across SFU campuses | Invest in Open educational Resource Grants as proposed by the SFU Library and TLC, for adoption, adaptation or creation of open textbooks and/or OER (Appendix M).  
Support the work of a Learning Spaces Renewal committee and provide additional investment and support for projects for physical spaces across campuses to make them more comfortable and conducive to studying – additional electrical outlets to charge devices, new furniture, better lighting, more maintenance, etc. | Fall 2015 – Fall 2016 | 3 per semester X $5K |
| Aligning Educational Research and Services for the Future | R7. Appoint a senior administrator to guide and facilitate a strategic approach to learning and teaching across all learning units at SFU | Create an Associate VP Teaching and Learning job description and post the position in spring 2016.  
Appoint a Special Advisor or Project Manager to the VPA to guide the project work of the TFFE in the interim.  
Continue the TFFE Project Coordinator position, along with any required RAs, to maintain project momentum and manage pilot projects that are initiated as an outcome of the TFFE report. | Spring 2016, Summer 2015, July 2015 – June 2016 | TBD, TBD, $75K |

TFFE Linkages to the Academic Plan

The Academic Plan outlines the academic priorities for the university in the context of SFU’s strategic vision. The Academic Plan for 2013–2018 notes that, “universities are expected to provide greater support for students, not just in academic areas, but also in relation to personal or societal factors that may impede student access and success. At SFU, we also have the challenge of meeting the expectations of an especially diverse student population.”

It also notes that the influence of innovations such as MOOCs and other online technologies compel the university to “examine carefully how online resources and mobile technology can be integrated into academic programs, and whether there is any potential to make content and learning more accessible and affordable without sacrificing quality.

In response to these challenges, the Academic Plan outlined a number of academic priorities that are closely linked to the concept of flexible education, including the following:

• Increased diversity of teaching methods
• Increased off-campus learning opportunities
• Improved access to courses
• Improved infrastructure to meet students’ learning and other needs
• Programs for mature, returning and non-traditional students

It is from the range of objectives and activities within the Academic Plan that the TFFE gained additional context for its research and community engagement processes.

How did the TFFE do its work?

April – August 2014

The TFFE project team took an agile approach to project management, dividing tasks among team members and research assistants (RAs), and used online systems for project management (Wrike.com), information analysis (Dedoose.com) and communications (Word Press).

Initial tasks included:

• Setting up a website for internal communication using Word Press
• Proactively communicating TFFE tasks, timelines and initial findings, as well as inviting input through online polls and questionnaires
• Identifying programs, projects, service units, groups and individuals for conversations and interviews
• Conducting small group conversations on dimensions of flexible education to help identify a definition that might work in the SFU context
• Gathering related internal reports from previous task forces and projects teams
• Gathering research literature on flexible learning and flexible education for review and summary
• Prototyping a survey for faculty and instructors that could be used during the summer semester

After the initial review of literature, project team members focused on four dimensions of flexibility for students, faculty and staff that included the following high-level themes:

• Program designs
• Pedagogical innovations
• Student experiences
• Infrastructure and services

During the time period April – August 2014, the TFFE project team gathered external data on flexible education and from its conversations with individuals, program teams and departments within the university community. The project team also reviewed institutional reports from within SFU, as well as strategy documents and task force reports from external higher education institutions. Included in these document reviews were reports or strategy papers from the institutions and organizations listed below, as well as from many others that can be found in the TFFE reference list.

• University of British Columbia
• Brock University
• University of Calgary
• Cornell University
• University of Guelph
• MIT - Massachusetts Institute of Technology
• McMaster University
• Queen’s University

During summer 2014, the TFFE project team also conducted a faculty survey. A summary of key survey findings can found in Appendix H. A summary report for the entire survey can be found at http://sfu.ca/~tffe/facultysurvey.pdf

August 2014

In August 2014, the TFFE produced an interim report based on initial data collection and community engagement activities. However, the working group structure recommended for fall 2014 did not move forward. In its place the TFFE recommended a strategy and vision session to help refine TFFE directions, deferring further community engagement until January 2015. Link: http://flexed.sfu.ca/?p=169

September 2014: Strategy and Vision was seen as an overarching theme by working group co-chairs

On September 23, 2014 working group co-chairs met to plan activities for fall 2014. At the meeting, co-chairs recommended an initial strategy and vision session to help further refine the definition of flexible education at SFU, and identify a set of core principles to guide working group activities.

October 2014: Principles identified through the strategy and vision process

The outcome of the October TFFE Committee meeting was an updated definition of flexible education, along with a set of principles developed through a strategy and vision process. At the strategy and vision workshop, TFFE members identified themes for further exploration. What was important to Task Force members was that “flexibility” be considered as an enabling strategy, not an end in itself. At the workshop session TFFE members defined a mantra for their work.

“Relevance is the goal; flexibility is the enabling strategy; responsiveness is the practice.”
Updated flexible education definition

The term flexible education was seen as an enabling strategy through which SFU could provide added relevance, meaning and real world experiences to its academic programs.

"Flexible education at SFU encompasses the ways in which the university community collectively and individually designs and provides relevant and community-engaged academic programs in response to changing student needs."

Key themes and principles

During a facilitated workshop session, TFFE members identified a number of themes and principles. The project team captured the principles and themes, and grouped them into a table along with goals, and potential task group questions for further examination through ongoing community engagement processes.

<table>
<thead>
<tr>
<th>#</th>
<th>Principles identified in TFFE strategy sessions</th>
<th>Themes emerging from strategy sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Relevant, real-world experiences are the basis of all SFU teaching and learning programs, degrees and credentials</td>
<td>Relevance, Real world experience, Flexible education as an enabling concept, Community engagement, Experiential, Employability, Discipline awareness</td>
</tr>
<tr>
<td>2</td>
<td>Interdisciplinary academic perspectives and output-based programming are key values of an SFU education</td>
<td>Interdisciplinary degrees, Experiential &amp; Employability, Community engagement, Output-based degrees, Prior learning credit, Enabling perspectives from grassroots, Collaboration with other universities, Support for mature, working students, Discipline awareness, Disciplines are expertise not silos</td>
</tr>
<tr>
<td>3</td>
<td>Learning-centred approaches to programs, teaching, support systems are hallmarks of the SFU student experience</td>
<td>Learner control and intention, Designed learning, Discipline awareness, Experience requirements, Community engagement requirement, Connection making, Experiences inside and outside classroom learning, Meaning making, Online Learning, Learning Spaces</td>
</tr>
<tr>
<td>4</td>
<td>Innovative, technology enabled teaching and learning methods are practiced and supported at SFU</td>
<td>Best available technologies used, Support for teaching innovation, Disciplines are expertise not silos, Online Learning, Learning Spaces</td>
</tr>
</tbody>
</table>

November 2014

In November 2014, the TFFE re-organized itself into two working groups to explore themes that emerged from sources including vision and strategy session, from external reports, and from the initial community engagement process. Themes explored in the second round of community engagement were based on the notion of relevance.

What does it mean to say that a university education is “relevant?” And what is the connection between relevance and flexibility in education? How can SFU maintain, grow and enhance relevant learning experiences for its students?
“The meaning of relevance is constantly evolving. The primary role of the Task Force is not to define relevance for today, but to help create an environment that empowers and encourages the academic community to respond nimbly to changing needs and opportunities, tomorrow and the day after.” – from TFFE strategy and vision session, October 2014

Members of the university community were invited to share their thoughts about the directions in which university teaching and learning is—or should be headed—at one of three World Café style consultative events hosted by the TFFE in January and February 2015. The cafés provided a forum for large- and small-group dialogue organized around five themes:

- Relevance
- Program design
- Teaching approaches
- Infrastructure and support
- Student agency

**January 2015**

Working group co-chairs met in January 2015 and recommended that the TFFE project team proceed to develop a report and action plan soon after the conclusion of the second round of community engagement activities. The co-chairs also recommended that the TFFE team identify potential action projects that might follow from the report and recommendations, and begin some of those in advance, where appropriate.

**January – March 2015**

In January 2015, the TFFE organized an open presentation by Jan Unwin, Superintendent of student transitions in B.C.’s Ministries of Education and Advanced Education, to provide a glimpse into the changes that could shape SFU’s incoming students—and their expectations—in the years ahead. See Appendix D.

A series of three World Café style interactive events were hosted in Burnaby, Vancouver and Surrey for members of the SFU community. A series of three student focus groups were hosted by the TFFE. The theme of the events was, “If I ran SFU...” and conducted in World Café interactive data collection sessions – Appendices E and F.

**April – June 2015**

During the April to June 2015 time period, the TFFE members and project team will assemble and review a draft report and recommendations prior to a final report submission to the Vice-President Academic that is due before June 30, 2015.
The TFFE Activity Timeline

The timeline below describes the meeting dates and activities of the TFFE project team and the Task Force members, as well as events that took place throughout the research and community engagement processes.
Appendix B: Themes Emerging From Initial Research and Engagement Processes

Using community engagement processes the TFFE project team sought to validate and extend the initial themes from the flexible education literature through interviews, focus groups, polls and surveys. The team also sought to identify emergent themes that had significance in the SFU experience that were identified through the voices of SFU community members.

All interviews and focus groups were summarized and coded using qualitative analysis software. A list of emergent themes along with their associated frequencies was created.

<table>
<thead>
<tr>
<th>Emergent themes from Literature Review</th>
<th>Emergent themes from meeting and focus groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Learner engagement (28)</td>
<td>• External institutional examples, outside of SFU (52)</td>
</tr>
<tr>
<td>• Blended learning (24)</td>
<td>• Suggestions for flexible educational practices for SFU (48)</td>
</tr>
<tr>
<td>• Learning spaces (23)</td>
<td>• Technology (39)</td>
</tr>
<tr>
<td>• Flipped learning (18)</td>
<td>• Teaching and pedagogy (38)</td>
</tr>
<tr>
<td>• Fully online learning format (16)</td>
<td>• Program-led innovations at SFU (32)</td>
</tr>
<tr>
<td>• Pedagogical and andragogical practices (16)</td>
<td>• SFU culture and administration (31)</td>
</tr>
<tr>
<td>• Support services (16)</td>
<td>• Institutional concerns (24)</td>
</tr>
<tr>
<td>• Definitions of flexible education (15)</td>
<td>• Lifelong learning and demographics (22)</td>
</tr>
<tr>
<td>• Flexible pedagogies (15)</td>
<td>• Flexible education practices at SFU (21)</td>
</tr>
<tr>
<td>• Differentiated evaluation (12)</td>
<td>• Learning spaces (21)</td>
</tr>
<tr>
<td>• Experiential learning (11)</td>
<td>• Consultations with SFU stakeholders (20)</td>
</tr>
<tr>
<td>• Student engagement (11)</td>
<td>• Instructor-led innovations at SFU (19)</td>
</tr>
<tr>
<td>• Retention implications (11)</td>
<td>• Support for faculty to adopt flexible education (19)</td>
</tr>
<tr>
<td>• Work-based learning (10)</td>
<td>• Disabilities (19)</td>
</tr>
<tr>
<td></td>
<td>• Teaching and Learning Centre involvement (18)</td>
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<tr>
<td></td>
<td>• Accessibility (18)</td>
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<tr>
<td></td>
<td>• Faculty insights into student needs (17)</td>
</tr>
<tr>
<td></td>
<td>• Role of the institution in flexible education (17)</td>
</tr>
<tr>
<td></td>
<td>• Experiential learning (16)</td>
</tr>
<tr>
<td></td>
<td>• Support services for students (16)</td>
</tr>
<tr>
<td></td>
<td>• Program and course improvements (15)</td>
</tr>
</tbody>
</table>
Appendix C: Summaries of Activity at Other Universities

The TFFE project team explored reports and strategy documents from universities across North America. Notes from the working papers and websites of eight universities are summarized in this appendix. The notes provide comparative information on approaches to teaching and learning strategy, services and support. Documents from universities noted can also be found in the reference list at the end of this report.

University of British Columbia

Flexible Learning: Charting a Strategic Vision (http://flexible.learning.ubc.ca/)

The University of British Columbia has operated a Task Force on Flexible Learning. It defines flexible education as follows:

“We define Flexible Learning (FL) as: UBC's response to the opportunities and challenges presented by rapid advances in information and communication technologies, informed by the results of learning research and motivated by the objectives of improving student learning, extending access to UBC and strengthening University operating effectiveness.”

Three goals guide the UBC flexible learning approach. They are:

• Enhance educational outcomes for our students, building on existing UBC expertise and strengths
• Enable greater access to UBC learning
• Improve university operating effectiveness through new learning models

The UBC flexible learning strategy encompasses four priorities and a focus on the role of technology in teaching and learning:

• UBC and faculty investment in blended transformation of high-impact undergraduate courses
• Targeted growth in professional programs (Applied Master’s programs; certification)
• Creation of a flexible continuum of learning between credit and non-credit
• Deliberate innovation in flexible learning (e.g., in MOOC space)

Brock University (https://www.brocku.ca/pedagogical-innovation)

Brock University has invested in a Centre for Pedagogical Innovation (CPI). The CPI is committed to fostering a culture of excellence in teaching and learning across Brock University. Through outreach and services to Brock faculty, instructors, teaching assistants, and staff, the CPI endeavors to bring people together to explore effective teaching and learning practices, as well as innovative pedagogies, both in the classroom and in the online environment.

The Centre for Pedagogical Innovation (CPI) has an important role in supporting instructors that are developing courses as part of Brock University's eLearning Initiative. The CPI directly supports eLearning Initiative instructors by providing pedagogical consultation and direction, technical resources, and support services. The CPI also partners with the instructor in the design, delivery, and evaluation of eLearning courses.

The CPI also supports the educational technologies of and offers pedagogical consulting to instructors that are not participating in the eLearning Initiative.
University of Calgary

Taylor Institute for Teaching and Learning (http://www.ucalgary.ca/taylorinstitute/)

The Taylor Institute for Teaching and Learning is a cornerstone of the University of Calgary’s Eyes High vision and strategy. The university adopted Eyes High in 2011, committing to enriching the quality and breadth of learning.

The Taylor Institute will take the lead in education innovation by bringing a unique, research-based approach to teaching and learning. Housed in a groundbreaking new building, the Taylor Institute will be a hub for enhancing teaching and learning experiences across campus. The institute was conceived as a collaboration across three interdependent units: the Office of Experiential Learning, the College of Discovery, Creativity and Innovation, and the Educational Development Unit.

In addition to promoting educational research, the Taylor Institute for Teaching and Learning will also provide students with a wealth of new hands-on learning opportunities. Undergraduate students from a variety of faculties will be brought together to collaborate on social issues, acquiring research, problem solving and critical thinking skills key to their future career success.

Learning and Teaching Focus
According to its website, the Taylor Institute for Teaching and Learning will be the first of its kind in Canada. It will be unique among Canadian universities with its integrated focus on providing students with experience-based learning opportunities, helping teachers become better teachers and conducting ongoing research into teaching and learning. Other post-secondary institutions may incorporate some aspects of these concepts, but none have taken the University of Calgary’s holistic approach to improving the learning experience for all students and teachers.

The Office of Experiential Learning will be located within the Taylor Institute and will dramatically increase the number of hands-on learning opportunities for students, including internships and service projects designed to provide career-building experiences. This shift outside the classroom ensures learning takes place where students choose to work, volunteer or lead.

Vice-Provost (Teaching and Learning) Appointment
The new position of vice-provost (teaching and learning) was created to ensure that the commitment made in our Eyes High vision and Academic Plan priorities to enrich the quality and breadth of learning at the university is attained. This role will lead the implementation of the Integrated Framework for Teaching and Learning.

Cornell University (https://www.now.cornell.edu/engaged/)

Engaged Cornell at a glance

Three main areas of focus: student and faculty engagement, impactful partnerships and transformative leadership and influence in higher education

Engaged Cornell’s collaborative and integrative goals by 2025 are to:

- Elevate student participation in high-quality community engagement to 100 percent;
- Enable academic departments across Cornell’s colleges and professional schools to offer community-engaged learning courses across all disciplines, at both the introductory and advanced levels;
- Develop and support hundreds of new community-university partnerships around the world;
- Prepare faculty members in all departments and disciplines in community-engaged research and teaching;
• Establish university-wide learning outcomes to instill shared values across Cornell curricula, student life and campus culture;
• Launch a new engaged-learning leadership development program, available to all students across colleges, Leadership for the Greater Good, where student exemplars who successfully complete the program will receive special recognition upon graduation;
• Recognize faculty who excel in community-engaged teaching and research;
• Provide official, accurate and unbiased information and analysis for outcomes assessment, to support continuous improvement, and to share with other higher education institutions;
• Position Cornell as a recognized educational leader in community engagement; and
• Be a major reason why faculty and students choose Cornell.

Definition of community engaged learning
At Cornell University, community-engaged learning is a form of experiential education where students, faculty and staff:

• Build collaboration with diverse stakeholders, through organized service activities in specific community contexts, to address social problems and issues
• Integrate theory with practice
• Engage in active, reflective learning
• Gain knowledge and skills in academic disciplines while advancing their personal, professional, and social development

Transformative leadership and influence – establish an overarching leadership and administrative infrastructure dedicated to public engagement for the entire university, including the creating of a Director of Engagement position reporting directly to the Provost and to the President.

Elevate undergraduate student participation in community engagement to 100% - all students will be provided with transformative ‘introductory’ experiences, while offering a tiered sequence of ‘advanced’ experiences for those who are exceptionally motivated in pursuing higher levels of engagement

Faculty

• Fund and stimulate integration of engagement in departments/curricula
• Expand professional development opportunities and create cross-disciplinary networks for faculty
• Recognize faculty achievement in engagement
• Facilitate off-campus, faculty-led engagement endeavors

Succession planning and Implementation of the Engaged Cornell Strategy
Approximately half of Cornell faculty will retire in next 10 years, so the University will need to hire professors who will be the heart of this new academic renewal. This will provide an opportunity to renew the academic culture and build towards the values of public engagement. For the first ten years of the Engaged Cornell plan, the University will build institutional skills, structures, and capacities – establish internal teams and networks of engagement across faculty departments and disciplines to accelerate shifts in academic culture and to create organizational capacity for persistence and resilience in the face of leadership transitions. At a later stage, Cornell will move towards routine engagement practices, the expansion of partnerships, and the demonstration of public impact.
University of Guelph (http://opened.uoguelph.ca/)

Teaching Support Services (TSS) and the Office of Open Learning (OOL) have come together under the name Open Learning and Educational Support. Its mantra is: Creative, Flexible, and Innovative.

Under the new banner of Open Learning and Educational Support, is working towards enhancing the quality of teaching and learning on campus. Currently, it provides support in three key areas:

- Classroom Technical Support (CTS) (e.g., classroom design and technology)
- Learning Technologies and Courseware Innovation (e.g., Desire2Learn, PowerPoint, learning objects)
- Educational Development (e.g., curriculum/course design, instructional practice)

MIT - Massachusetts Institute of Technology

Institute Wide Task Force on the Future of MIT Education (http://future.mit.edu/)

Through a Task Force on the Future of MIT Education, the Institute sought to re-emphasize its history of pedagogical “boldness” – specifically, problem-focused, hands-on and experiential education. However, MIT also wished to balance the tension between a desire to preserve many of the qualities that define the Institute, and a push to make changes to its very core. It was focused on remaining on the cutting edge of research and education, to maintain its position as one of the world’s premiere research institutions – but also respond to shifting global, technological, economic and political landscape.

Key influencing trends noted by the MIT Task Force included: increased potential and demand for disaggregating and unbundling of products, blurring of boundaries (media and platforms), affordability and access, and the opportunities afforded by serving learners at scale through innovative technological strategies such as massive open online courses (MOOCs).

MIT’s approach included the following actions:

1. Institute of Educational Innovation – bold experimentation
   a. Undergraduate education – more flexibility, diverse pedagogies, modularity, new assessment approaches
   b. Summer credit classes – opportunity for experimentation
   c. Inter-School synergy – incentivize faculty to collaborate
   d. Expansion of cohort-based freshman learning community model
   e. Use online and blended learning to strengthen teaching of communications

2. Creation of an Undergraduate Service Opportunities Program
   a. Opportunity to work with a faculty mentor
   b. Possibly be done for credit
   c. Provide local mentorship for globally offered courses

3. Explore online and blended models to improve graduate curriculum accessibility – online demand modules may target upper level material that might otherwise be taught infrequently

4. Extend pedagogical innovation globally (MITx, and edX), partnering with other institutions
   a. Modularity based on learning objectives and measurable outcomes – the unbundling of classes reflects a larger trend in society, and enabled JIT delivery, allows instructors to develop online material in smaller increments, which may be re-used across departments and schools
5. Creation of a lasting community and knowledge base for MITx learners (Wikipedia-like)
6. Define a K-12 strategy through a special interest group under the Initiative for Educational Innovation
7. New opportunities for engagement around the world
8. Explore certifications supported through MITx and edX and develop pricing methodologies
9. Establish a working group on spaces for future student life and learning
   a. Classrooms, library, performing arts and ‘sandboxes’, and other common spaces
   b. Ensure that campus is comprised of spaces needed to enable to next generation of student life and learning
10. Bolster infrastructure for executive and professional education, and engage faculty to broaden program delivery
    a. Coordinate programs to systemize pricing, as well as a standard methodology for compensating planners, developers, instructors, hosting departments

McMaster University

Forward with Integrity – Student Experience Task Force – McMaster University (http://fwi.mcmaster.ca)

“Inspire students to direct their own learning and development with appropriate guidance and support.”

Four Main themes:

• Flexibility (structure, delivery, availability, and pedagogy)
• Enhance Interdisciplinary Opportunities
• Enhance support for student development and growth
• Enhance opportunities to connect learning with primary research

Recommendations:

1. Flexibility strategy in learning structures that ‘slows the pace’ for students
   a. ‘Class-free period” (2-5 days) activities on campus, time for reflection
   b. Use of block programming, online and blended, relevance and need for prerequisites, course length, use of pass/fail courses
   c. Community engaged learning, co-ops, internships, experiential and problem based learning, filed/studio/lab-based learning
2. Recognize and facilitate student learning in both curricular and co-curricular environments
3. Develop an effective mentorship program – see below for passport
4. Improve institutional structures
5. Effectively integrate teaching and research in the curriculum
6. Foster interdisciplinary and community engagement

Passport or badge program for service learning and to support graduation outcomes

• Mandatory course with credit in the final year of study but lasts for the duration of the students’ time at school
• Network of mentors is essential
• Committee of faculty and students to determine which activities would be credited
• Student reflection on their experiences is essential
Queen’s University

Queen’s Teaching and Learning Plan Overview (from the Task Force on the Student Learning Experience)
(http://www.queensu.ca/provost/responsibilities/committees/s.html)

Revise the name, mandate and scope of the teaching and learning service unit

- Course or program redesign, new program development, learning spaces
- Full-service model – advising and consulting, but also full instructional design, program redesign, educational technology support
- Seamless interface with educational technology to support technology-enhanced learning by integrating IT staff who support teaching and learning
- Hub and spoke model ensuring coordination with teaching and learning services across faculties and units
- Support the development of laddered programs

Competitive, Campus-wide teaching enhancement program
Implement both a high impact program for large teaching enhancement programs (strategic program re-design), but also smaller innovations program for course redevelopment

- Create mechanisms for hiring teaching-focused positions, that include scholarship of teaching and learning – these positions have a higher teaching load, and include research related to teaching and curriculum development activities
- Review processes for evaluating teaching for the purpose of merit, annual review, and RTP to ensure they recognize teaching and learning contributions
- Implement a credential in teaching and learning in higher education

Develop university-wide support for eLearning

- Single portal for all online courses and programs across the university
- E-learning speaker series
- Resources for specialists and instructors to attend eLearning conferences
- Support for early adopters
- Encouragement for the scholarly development of eLearning
- Exemptions for instructors to explore new technology enhanced teaching and learning (e.g. Exempt from negative consequences of evaluations – perhaps a one-year hiatus)

Enhance first-year transitional programming

- Expansion to all faculties of SOAR (Summer Orientation to Academics and Resources) – several days in July, and provides incoming students (and their families) the chance to attend sessions given by faculty, staff, and upper-year students on academic preparedness, learning support services, course selection and academic advising
- QSuccess program – workshops throughout the first eight weeks of first year on a number of academic and personal transition issues
- “Bounce Back” program for students struggling after first semester to help them get back on track
Define and develop experiential learning

- Establishment of an experiential learning group (potentially under the Teaching and Learning Centre) to facilitate the development and growth of self-sustaining curricular and co-curricular based experiential opportunities
- Develop system-wide best practices and collaborative processes

Review effectiveness and structures for academic and career advising

- Little assessment of effectiveness of career and academic advising – conduct a review to assess structures and approaches to recommend possible changes to the overall model

Process

Phase One
Broad areas of focus, and review of literature (provided)

January – facilitated session to identify key issues and ideas

Group divided into four subcommittees mapped to four areas of focus

- Subgroups met independently to work on key issues and specific recommendations
- Reviewed literature and data from IRP, consulted with key stakeholders on campus, and visited another university and attended a conference

Half-day retreat held at beginning of May where each sub-group identified 5-6 key recommendations. The group prioritized the proposals and identified those that should receive immediate attention. Interim report created.

Phase Two
Establishment of five new subgroups

- Met with key stakeholders
- Gathered key materials
- Develop actionable plans for implementation

The Queen’s University Task Force whole continued to meet on monthly basis until submission of final report.
Appendix D: Key Directions from K-12 Transition Event

Ministry support for student passion, purpose and personalization in their programs of study

British Columbia’s K-12 curriculum is changing, and that means students will soon be arriving in our classes with different skill sets and expectations. The implications for university teaching and learning could be significant.

In January 2015, the TFFE organized an open presentation by Jan Unwin, Superintendent of graduate and student transitions in B.C.’s Ministries of Education and Advanced Education, to provide a glimpse into the changes that could shape SFU’s incoming students—and their expectations—in the years ahead. Jan Unwin is one of the people leading curriculum reform and working to expand initiatives such as dual-credit programs and opportunities to allow secondary students to earn credits towards post-secondary. Her presentation provided an overview of K-12 curriculum changes, with an emphasis on how learner expectations and their recent educational experiences may be different than what the university has experienced from past student intakes.

The open event, sponsored by the TFFE, provided a forum for discussion of educational change and the need for flexible and responsive systems that can enhance the relevance of the university experience for new intakes of undergraduates. Unwin noted that from the Ministry of Education’s surveys and focus groups with university-bound learners that passion, purpose and personalization were three elements that K-12 students viewed as fundamental to the ideal education system for their futures.

According to Unwin, the provincial government is taking a bold leap towards reimagining and restructuring the K-12 public education system to make it more reflective of today’s diverse educational needs. “It’s a mind shift,” she said, adding that the current K-12 system is built on “systems and models and structures that were set up for a different age.” Unwin indicated that the government had identified five key areas of focus for the next B.C. Education Plan: personalized learning, quality teaching and learning (including mentorship), flexibility and choice, high standards, and learning empowered by technology. A key question guiding the government’s exploratory study went like this: Why should our education system be one-size-fits-all when we know that no two students are alike and that they come to us with different goals, aspirations and competencies?

Perhaps one of the largest pedagogical shifts within the proposed plan is the focus on competencies rather than content as the driver. Unwin described the vision as one in which teachers take on a coaching and mentoring role to assist students with finding their passion and a successful pathway to their future. The proposed transformation of the K-12 system will have implications for post-secondary institutions like SFU. The TFFE has highlighted these types of issues and used its second round of community engagement to generate discussion about how the university could be more responsive to, and prepared for, students who will expect approaches to teaching and learning that mirror, at least to some degree, the reimagined K-12 curriculum.

“We want to create the best possible life chances for kids and young adults, and we want them speaking about their entire educational experience with passion, purpose and pride... "We need to work collaboratively to get it right." – Jan Unwin, Superintendent, Ministry of Education.
Appendix E: World Cafés On Three Campuses

A vision of engagement: students, research and community: World Cafés on three campuses

Over 80 faculty members, staff and students attended World Cafés hosted by the Task Force on Flexible Education at the Burnaby campus on January 26, in Vancouver on February 2, and in Surrey on February 17.

The participants, supplied with refreshments, writable table covers and a collection of colored markers, moved from table to table to discuss key questions related to flexibility and responsiveness in education. The result—captured visually by graphic recorders—was a compilation of thoughts ranging from the cautionary to the visionary to the practical.

The World Café series provided additional input into the work of the TFFE as it developed recommendations to ensure that SFU instructors and programs receive the support and services they need to continue providing responsive and flexible learning experiences for our students.

The conversations during the World Café events focused on five themes identified by the TFFE for exploration: relevance, teaching approaches, program design, infrastructure and support, and student agency. A challenge for the task force was to sort through the many ideas proposed by participants in order to identify clear goals and actions. Participants, however, did seem to agree about broad principles, including the following:

- Progress toward flexible and responsive practices and systems will require institutional support, including a financial commitment, to foster cultural change.

- Change will require continuing dialogue with the various members of the university community (students, faculty, administration, unions, and other representational bodies) about the implications for SFU’s organizational and service structures.

- The university should build on existing “flexible” initiatives, in part by sharing more widely current achievements and exemplary models of practice across the SFU community.

- Long-term transformation will require changes to the infrastructure and services that support teaching and learning activities, making them more responsive to faculty and student needs.
In addition, World Café participants suggested a number of concrete steps to providing responsive initiatives that address changing student needs:

- Address students’ desire for marketable skills by being more explicit about how the strengths of a university education—including critical thinking, literacy, citizenship and writing skills—deliver what employers want.
- Conduct research to define the meaning of relevance within different departments and student populations.
- Incorporate experiential learning opportunities into all programs through capstone projects, community-based courses and other forms of active and community-engaged learning.
- Encourage and support inter-disciplinary work and provide budgetary incentives for faculty members to undertake such activities.
- Investigate new approaches to course structures, including their length, delivery modes and scheduling.
- Introduce a foundational course on learning for life in which students could learn study skills, critical thinking methods, assessment of scholarly materials, and other related skills.
- Provide better advancement opportunities for good teachers.
Appendix F: Student Focus Groups

“If I ran SFU” - student focus groups

In addition to the World Café events that invited participation from across the university community, TFFE staff conducted a series of focus groups with approximately 35 students at the SFU Burnaby campus on March 4, 11 and 17, 2015. Following a similar format to the World Cafés, students were asked a series questions that focused on the themes of relevance, program design, infrastructure and support services, teaching approaches, and student agency. The events were branded as, “How would you run SFU?” At the focus groups, students were asked to highlight aspects of their SFU experience that they viewed as positive, and to contribute ideas for improving the overall learning experience for students at SFU. Students did not hold back, and contributed freely with only minimal facilitation by TFFE team members.

When asked about relevance, students overwhelmingly pointed to their desire for experiential, “real-world” curricula that would provide them with the knowledge and skills to transition to a related career after graduation. This theme permeated most areas of the discussion. For example, students asked for professors to illustrate how their research and teaching applied outside of the university. First-year students highlighted their high-school education where they gained experience with volunteering and community-based projects, and questioned why these sorts of projects were not a part of the university experience for all students.

Two themes that emerged from discussions on infrastructure and support focused on advising and mentorship, and physical spaces at SFU. There was agreement from students that there is room for improvement in the way student services are communicated to them initially when they transition to SFU from high school and throughout their time as students.

Students indicated that there are crucial times in their educational lives where they would like additional help – mainly at the “transition” points: when they first arrive on campus and are trying to adjust to university expectations, later when they are at a point in their degree where they have to commit to a major, and finally, when they are making decisions about career options and transitioning to employment.

From these discussions, a few clear themes surfaced as priority items for students.

- Students are looking for more action-based learning experiences that will prepare them for research careers, or employment outside of the university. These experiences include team-based and project-based experiences, community-based experiences, and a chance to work as well as network with local businesses and alumni.
- Students pointed out that SFU’s strengths included its unique and interdisciplinary programs. They highlighted programs like Criminology, Health Sciences and Interactive Arts and Technology (IAT) as examples. They also appreciated the joint major and co-op opportunities available in most disciplines, and suggested the university provide more of these types of options.
- Students admitted to feeling overwhelmed and unsure of their direction throughout the duration of their programs, and therefore had difficulty making sound decisions. They admitted to often being unaware of the
choices and options available to them in terms of university support services, as well as how their program and courses would translate into post-graduate employment.

- Students expressed a desire to feel supported, and be a part of a community. They highlighted first-year learning communities where the staff knew their names as a positive example. This theme also extended into the classroom where students valued instructors who were both passionate about the subject area, and about students.

Within these main themes, students provided a number of related action items for the Task Force’s consideration:

- Allow students to ‘try out’ more classes, for example, more choices in courses outside of their discipline, and allow participation in more interdisciplinary courses.
- The option to attend classes either online or in person would be ideal and offer greater flexibility; however, having additional access to classes available through web streaming or lecture capture would also be helpful.
- “Take the fear out of asking for help.” Provide more informal avenues to seek advice and assistance; provide additional mentorship opportunities.
- Increase advising options and availability – preferably earlier in their degree. Faculty and staff should be part of the student’s experience from orientation program onward.
- Increase the level of department-specific career advising; integrate it as part of the program so that students can become more aware of career options available to them, and have a deeper understanding of how the knowledge and skills they are building in the classroom are valued by employers.
- Less emphasis on exams, more project-based, hands-on learning and assessment.
- More practitioners in the classroom, and more opportunity to apply theoretical concepts learned in class in real life scenarios.
- Renovation of physical spaces to make them more comfortable and conducive to studying – additional electrical outlets to charge devices, new furniture, better lighting, more maintenance, etc.
- More intersession options (like UBC or UVIC), so students have some time off in the summer for reflection, employment, travel, volunteer opportunities, etc.

Overall from the discussions, students indicated that they were looking for an active learning environment at SFU, with more support and personalized service, especially in relation to their program and career choices. Because many of the students who participated in focus groups were also involved in community work or other employment, they also appreciated flexible measures that allowed them to have time of their own, and avoid having to come to campus when issues arose in their personal lives.
Appendix G: Matching SFU Strengths with Emergent Needs

Changing student expectations from Undergraduate Student Survey Data

Student demographics at SFU are changing and so are the expectations of university students. The undergraduate student surveys for 2011 through 2013 provided snapshots of trend data that illustrated some of those changes. Table 1 provides some illustrative highlights.

Table 1: Highlights of findings related to flexible education that emerged from SFU undergraduate student surveys from 2011, 2012 and 2013

<table>
<thead>
<tr>
<th>What is the single thing that you would change at SFU? (2011, 2012, 2013)</th>
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<tbody>
<tr>
<td>2013: 1. Student life/Campus Community, 2. Facilities, 3. Course availability</td>
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<table>
<thead>
<tr>
<th>What are you hoping to get out of your education?</th>
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<tbody>
<tr>
<td>2013 – Good job (49), train for a career (40), fulfill desire for knowledge (34)</td>
</tr>
<tr>
<td>2012 – Good job (50), train for a career (37), fulfill desire for knowledge (35)</td>
</tr>
<tr>
<td>2011 – Good job (65), fulfill knowledge (56), meet new friends (55), train for specific career (50)</td>
</tr>
</tbody>
</table>

* Increase in respondents choosing – build a network of role models, mentors, and professional contacts

<table>
<thead>
<tr>
<th>Important Qualities/Skills/Experiences SFU students should have by the time they graduate.</th>
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<tbody>
<tr>
<td>2013: Critical thinking skills (45), Ability to apply knowledge/methods learned in life and work (41), solid foundation in their specific academic discipline (28)</td>
</tr>
<tr>
<td>2012: Critical Thinking Skills (45), Ability to apply knowledge/methods learned in life and at work (42), Solid foundation in their specific academic discipline (29)</td>
</tr>
<tr>
<td>2011: Critical Thinking skills (60), Ability to apply knowledge/methods learned in life and work (49), Oral communication skills (43)</td>
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<th>2013 Highlights</th>
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<tr>
<td>55% currently employed or self-employed</td>
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<td>58% respondents agree or strongly agree that SFU is a place that supports students to have a healthy work life balance</td>
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<tr>
<td>52% agree or strongly agree that they feel part of a caring community at SFU</td>
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<th>2012 Highlights</th>
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<tbody>
<tr>
<td>56% respondents had taken an evening class</td>
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<tr>
<td>40% of respondents had taken an online class</td>
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<tr>
<td>61% of respondents indicated that they would be willing to take a required course if it were only available online</td>
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<tr>
<td>71% of respondents said they would be willing to take a required course if it were only available on an evening or weekend</td>
</tr>
<tr>
<td>59% of respondents said they purchased all of their required textbooks</td>
</tr>
<tr>
<td>53% currently employed or self-employed</td>
</tr>
<tr>
<td>Technology: Respondents were most likely to indicate the following as very/somewhat valuable to their academic success: email (98), wikis (75), podcasts/webcasts and or web-based music or videos (70)</td>
</tr>
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<table>
<thead>
<tr>
<th>2011 Highlights</th>
</tr>
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<tbody>
<tr>
<td>53% employed</td>
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Appendix H: Faculty Survey Summary

Key Highlights
The Task Force on Flexible Education conducted a survey of SFU faculty and instructors in August 2014. The survey questions were created and designed based on early literature reviews, common themes and issues brought forward by the SFU Community during the consultation process, as well as similar surveys run by other institutions. A summary of respondents as well as key highlights from select questions is presented below.

Respondents by Faculty

*May not equal 100% due to rounding
Respondents by Role

**Selected Questions**

**Technical Support for alternative teaching and learning methods is readily available.**

- 31.4% disagree or strongly disagree
- 29.2% agree or strongly agree

**SFU faculty and instructors are generally supportive of flexible and alternative learning experiences for students:**

- 72.4% agreed or strongly agreed that flexible teaching and learning can enrich students’ learning experiences (n=312)
- 67.6% agreed or strongly agreed that it is important that students have flexible options for their educational experience
- 61.5% (291 total responses) agree that flexibility plays an important role in addressing the needs of a diverse population of students

**Perception that flexible methods do increase workload for instructors**

- 63% agreed or strongly agreed (n=292)
- 34% of participants report that the learning spaces they use are not conducive to flexible teaching and learning
- In terms of promotion: only 14.5% of respondents agreed or strongly agreed that implementing alternative pedagogies would increase their prospects for promotion (n=291)
Typically who do instructors/professors go to for help or resources when implementing flexible teaching methods?

40% Faculty Colleagues, 23% Pedagogical Support from TLC, 22% Media and Technology Support from TLC, 17% CODE, 14% received no assistance.

What needs to be included in a strategic plan for implementing and supporting flexible education at SFU?

A qualitative analysis was completed based on the 157 responses to the above question. The responses were grouped according to themes, and then listed below by frequency.

| Recognition for teaching (in salary review, T&P processes) | 24 | Improved Communication (Sharing of examples and exemplar teaching practices, and further discussion with all stakeholders in regards to implementing flexible initiatives) | 11 |
| Support (unspecified) | 21 | Financial Support/Incentives | 8 |
| Review of Faculty/Instructor teaching load (more time for innovation, course re-development, course releases etc.) | 20 | Additional TA Support | 6 |
| Additional Training (in pedagogy and technology) | 14 | Improved/Additional Technology (both software and hardware) | 6 |
| Unsure/Don’t Know | 14 | |

• Other notable responses: team teaching, creation of a guide/typology for instructors and faculty to reference in regards to different flexible teaching methods, smaller class sizes, improved teaching spaces.
Appendix I: Exemplars of Flexibility from Across SFU Campuses

Throughout the task force community engagement process we approached faculty, students and service units to learn more about flexible programs and practices in which they were engaged. Some exemplars, which are currently underway, are highlighted in the sections that follow. There are many more examples, and these are but a few of the programs that are being developed and delivered across the SFU community.

Program innovations

Does a credit course need to be 13 weeks long? Do alternative formats provide any benefits?

Bruce Lanphear, a professor in Health Sciences, shed some light on these questions when he offered HSCI 483-3, an environmental health seminar, as a one-week intensive course during the spring 2013 semester break. Students praised the course (see the student comments below), and Lanphear, who co-taught the class with Glenys Webster, thinks he knows why: “If I had to single out the most important factor of success, it would be the format that resulted in the positive student feedback.”

“The condensed nature of the class allowed for a very high level of concentration and focus on one subject that allowed for more in depth learning. Unprecedented access to the profs for extra help, and the small class allowed for greater discussion and learning opportunities outside the classroom.” – HSCI-483-3 Student

Is the Web the professional portfolio space for our students?

For Suzanne Norman and John Maxwell of SFU’s Publishing program, the “publication of self in everyday life” should be a core piece of the university experience for all SFU students. Their vision is a liberal arts course that complements academic programs and provides students with the opportunity to build a professional portfolio of accomplishments that matches their areas of interest. Their PUB 101 course, titled, not surprisingly, “The Publication of Self in Everyday Life,” does precisely that.

“It’s the kind of first-year course that everybody in university should take. You take an English course to insure you can read and write. You take this course so you’ll know how to operate online, know what’s beyond your keypad and know how to take responsibility for it,” says Maxwell.

PUB 101 is part of the Print and Digital Publishing Minor, an increasingly popular choice for students of Communications, English, Business, and from SIAT (School of Interactive Arts and Technology) who are looking to build skills and increase their employability. It’s an example of a flexible learning experience that provides students with new digital publishing skills as well as the know-how to build their own professional portfolio.

For Suzanne Norman, who currently teaches the course with Juan Pablo Alperin, the strength of the course is its requirement for students to manage their digital presence end to end: “The PUB 101 course is about taking responsibility for public presence—taking ownership with no parental guidance.”
Teaching and learning innovations

Harnessing new tools for visualization in math and science programs

Dr. Nabyl Merbouh’s work in designing learning tools and replicas processed on a 3D printer is a great example of the diversity of the term ‘flexible education.’

Along with research machinist Ken Van Wieren, Dr. Merbouh, a senior lecturer in chemistry, has provided an opportunity for thousands of students across the province to physically hold equations and geometrical structures. “Math and chemistry students often have problems visualizing concepts,” Dr. Merbouh explains. Students studying anatomy can close their eyes, visualize their kneecap, and compare their intuition to a 3D model that they can then take home. Passive learning is transformed into an embodied experience in Dr. Merbouh’s class.

The flexibility of Studio Physics

Dr. Daria Ahrensmeier’s studio physics lab is buzzing with activity. Her students, in groups seated at round tables, begin class with a low stakes iClicker quiz on electrical circuits. After each polling result, the decibel level rises as students discuss why answers are either correct or incorrect. Rather than hurriedly moving on, Dr. Ahrensmeier, a theoretical physicist, is cool and calm. She smiles while those who got the correct answer gesticulate, draw diagrams, and talk it out with those who did not. In these conversations you can actually hear the students developing their own understanding of the process of electrical conduction.”

Flipping math education

Dr. Jamie Mulholland, a senior lecturer in mathematics, and recipient of the 2011 Teaching Excellence Award, is renowned within the SFU community for his flipped calculus courses. Flipped classrooms are one example of flexible education—students watch lectures posted on Jamie’s YouTube Channel, while class time is spent solving math problems.

Flexibility means “we aren’t just confining education to a particular time of day, when education can be arranged around work schedules.” Flexibility means “students can have open access to information, access to lectures and resources outside of the regular class time. Information should be free and accessible.” Students often have gaps in knowledge that could be easily remedied by obtaining access to course resources from prior years. “What students should be paying for is not simply information, but the face-to-face component and course accreditation.” Flexibility is also about “getting feedback—whether that’s a computer graded system, or from TAs outside of regular hours.”
Infrastructure and Support

How do enhanced physical settings affect learning?

On April 23, 2014, Peter Jamieson of the University of Melbourne (Australia) spoke at SFU about “Pedagogy in Place.” His presentation, the first public event organized by the Task Force on Flexible Education, was provocative in the best sense of the word. Jamieson’s research focuses on how physical environments affect learning.

In his remarks to a diverse group of SFU faculty and staff he advocated fundamental changes to the design of learning spaces inside and outside the classroom—all with the goal of facilitating more active and effective forms of teaching and learning.

Sometimes you have to build your own learning system

For André Gerolymatos, a professor and director of the Stavros Niarchos Foundation Centre for Hellenic Studies, the problem was straightforward — how do you build a system for Greek-language training that is engaging, productive and works on the mobile devices that today’s students consider everyday-carry equipment? In solving the problem, Gerolymatos and his colleagues in Hellenic Studies, illustrated the role of faculty and departments in spearheading innovation and flexibility at SFU.

“We were facing a serious challenge in offering Greek language in a university with a very small population of Greek speakers, in a city that has a very small Greek population to begin with.” – André Gerolymatos.

To address the challenge, he worked with Costa Dedegikas, the Centre’s technology manager and leader of a team of software engineers that recommended a modular approach to designing an online learning system that could host the language lessons. The design approach they took was future-oriented, allowing the learning system to be used with emerging mobile technologies, for learning languages other than Greek, and for use in other kinds of courses such as European history.

Open, digital learning resources may be a game changer for students and faculty

According to an article written by Max Hill, Features Editor for The Peak student newspaper, an increasing number of today’s students are finding ways to avoid amassing their own textbook collections by not even purchasing them in the first place. The impetus, he claimed, is due to the perceived high prices of texts – some of which many students don’t feel are worth their investment. Instead, he noted that over 50% of SFU’s students are turning online to the ever-burgeoning private used/loaned textbook market. However, Hill argued that a new movement is quickly gaining traction that may even thwart the best efforts of those looking to ‘recycle’ their texts to recoup some funds. Hill was highlighting a need for a new infrastructure to support digital learning resources.
Student Agency

Change Lab: Becoming comfortable with discomfort

Creating student discomfort in the classroom may not be the first thing that comes to mind when you think of a positive teaching experience. However, this is exactly what the instructors in SFU’s Change Lab aim to achieve.

The objective of this seven-credit experiential course, co-offered by the Faculty of Environment and the Beedie School of Business, is to challenge and empower students while equipping them with the skills required to create positive social change in a rapidly changing world with complex social and economic environments. From the beginning, students and instructors co-create shared values and rules of engagement to set the tone for the class. Depending on students’ interest areas and level of understanding in creating change, instructors engage various speakers to share their expertise on relevant topics such as social change, design thinking, entrepreneurship and innovation.

Students are required to be self-directed in the Change Lab. They develop an idea for a socially relevant project and execute that plan. The plan must be meaningful and must address a social problem that exists for real people in a real community. Building student agency is also an outcome the Change Lab aims to achieve.

The connection between flexibility and student well-being

When Tara Black hears “flexible education,” she thinks “student well-being.”

Black is the Associate Director of Health Promotion in SFU’s Health and Counseling Services unit. Her team takes a systemic approach to the creation of a healthy campus community by treating the university as an ecosystem and identifying factors that influence student well being. Inevitably, classrooms enter the conversation.

“If you think of SFU as a setting, the classroom is such a core part of the student experience,” says Black.

“Classrooms have a really profound impact on student well-being.”

She’s talking not just about the physical space, but about the academic experience, which can generate high levels of stress, isolation and depression in many students.

Often small adjustments in course design and delivery can dramatically reduce these negative aspects of the learning experience. Black cites the example of instructors who foster a sense of community by inviting students to introduce themselves at the beginning of a course.

“The idea isn’t to create a ton of work. It’s to raise awareness about the impact the classroom can have.” – Tara Black
For Black, the link between flexible education and the promotion of student well-being is the emphasis on being aware of, and responsive to student needs. She places particular emphasis on the value of providing students with choices and creating inclusive environments that support diverse groups of students.

And she notes that there is a pedagogical argument for this approach: “

There’s a definite connection between student well-being and academic success. If you have a positive classroom culture, the learning outcomes will be better.” – Tara Black

In collaboration with the Teaching and Learning Centre, the Health Promotion team partners with instructors and departments through its Well-being in Learning Environments Project.

**Student agency is about being truly engaged**

Raisa Crisologo, a BBA candidate (2016) provided her thoughts about flexible education in a TFFE blog post in December 2014 titled, Truly engaged: My SFU experience.

Flexible education – what does it really mean? I define flexible education through three aspects of what I believe are critical components of a flexible university education: balance, creative learning, and personal development. These three characteristics embody the kind of education that every educational institution should strive for.

Balance is a key aspect of flexible education. In terms of flexible education, this means that a university education should allow students to learn at their own pace, and in the way that works best for them. The university should be open to various types of learning structures, such that students are able to fit other spheres of their life (e.g., social life, family life) around their education. This means that students should have enough time to finish their degree, as well as have ample time to fulfill work commitments, to become involved with organizations, and to participate in social events and activities.

Flexible education should be an innately a creative learning experience. This means that there is not just “one way” of learning or of teaching a concept or an idea, but that there are different ways of doing so. A flexible education caters to various styles of learning – it essentially provides students a variety of avenues, methods, and learning techniques that allow them to learn in the best and most efficient way possible.

Lastly, flexible education should provide room for personal development, either through workshops and conferences, or through co-curricular components. A flexible education should include various opportunities for students to develop and grow into the best version of themselves. A great university produces responsible social citizens who are passionate about what they do, and are community-oriented. This to me is the mark of a stellar university. Thus, flexible education should provide room for students to personally grow and develop the necessary skills that they will need outside of university.
Appendix J: Experiential Education at SFU

List of Experiential Education Programs at SFU (partial)

<table>
<thead>
<tr>
<th>Co-operative Education</th>
<th>Community-Based Learning</th>
<th>Semester in Dialogue</th>
<th>Study Abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-Study</td>
<td>Peer / Mentorship Programs</td>
<td>Career Passport (Business)</td>
<td>Mentors in Business (Business)</td>
</tr>
<tr>
<td>Field Schools</td>
<td>Passport to Leadership and LEAD</td>
<td>City Studio</td>
<td>Semester in Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>ChangeLab (Environment)</td>
<td>Semester in Social Innovation</td>
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Practicum Courses by Faculty

Source: SFU - State of Experiential Education Report

<table>
<thead>
<tr>
<th>Subject</th>
<th>Courses</th>
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<tbody>
<tr>
<td>Archaeology</td>
<td>339, 435</td>
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<tr>
<td>Business</td>
<td>727</td>
</tr>
<tr>
<td>Kinesiology</td>
<td>343, 455</td>
</tr>
<tr>
<td>Communications</td>
<td>461</td>
</tr>
<tr>
<td>Criminology</td>
<td>880</td>
</tr>
<tr>
<td>Education</td>
<td>343 + PDP program</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>194</td>
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<tr>
<td>Contemporary Arts</td>
<td>272, 273, 372, 470, 471, 472, 473</td>
</tr>
<tr>
<td>Health Science</td>
<td>880</td>
</tr>
<tr>
<td>History</td>
<td>451, 461</td>
</tr>
<tr>
<td>Political Science</td>
<td>497</td>
</tr>
<tr>
<td>Psychology</td>
<td>821, 823, 825, 880, 882, 890</td>
</tr>
<tr>
<td>Publishing</td>
<td>477</td>
</tr>
</tbody>
</table>
Summary of Course-based Experiential Education Examples (partial)

<table>
<thead>
<tr>
<th>Type of Experiential Learning</th>
<th>Number of SFU Courses</th>
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<tbody>
<tr>
<td>Problem-based Experiences</td>
<td>416</td>
</tr>
<tr>
<td>Collaborative Experiences</td>
<td>245</td>
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<tr>
<td>Reflective Experiences</td>
<td>154</td>
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<tr>
<td>Field Experiences</td>
<td>135</td>
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<tr>
<td>Creative Project Experiences</td>
<td>264</td>
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<tr>
<td>Practical co-op courses</td>
<td>201</td>
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<tr>
<td>Directed Studies Courses</td>
<td>142</td>
</tr>
<tr>
<td>Community Based Experiences</td>
<td>90</td>
</tr>
</tbody>
</table>

**Key Recommendations from SFU Experiential Education report:**

One day Symposium on Experiential Education held in May 2013 – resulting report: Furthering Experiential Education at SFU.

1. Review and arrive at an institutional definition of Experiential Education
2. Develop Infrastructure and Support Mechanisms for Community Based Experiences
3. Develop an internal Teaching Exchange Program
4. Continue and preserve teaching and learning grants and the Honeycomb retreat
Appendix K: Software applications used and/or supported at SFU

Across the campuses of Simon Fraser University, individuals, departments and services units use many varied software applications.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Description</th>
<th>Technology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orbis</td>
<td>CRM system, event management, job postings and applications</td>
<td>Question and Answer</td>
<td>Discussion/voting tool</td>
</tr>
<tr>
<td>Symplicity</td>
<td>Job database and application system, event management</td>
<td>phpBB</td>
<td>Discussion forum</td>
</tr>
<tr>
<td>Canvas</td>
<td>Learning management system</td>
<td>Vanilla Forums</td>
<td>Discussion forum</td>
</tr>
<tr>
<td>Poll Everywhere</td>
<td>Voting system through smartphones</td>
<td>Mahara</td>
<td>E-portfolio tool</td>
</tr>
<tr>
<td>Lime Survey</td>
<td></td>
<td>RSS</td>
<td></td>
</tr>
<tr>
<td>Survey Monkey</td>
<td>Online Survey Platform</td>
<td>Articulate Storyline</td>
<td>Course creation/management</td>
</tr>
<tr>
<td>SFU Websurvey</td>
<td>Online Survey Platform</td>
<td>Lectora</td>
<td>Online training courses, assessment, and presentations</td>
</tr>
<tr>
<td>Qualtrics</td>
<td>Online Survey Platform</td>
<td>Lore.com</td>
<td>Repository of course content for online access</td>
</tr>
<tr>
<td>WordPress</td>
<td>Website</td>
<td>Vidyo</td>
<td>Videoconferencing</td>
</tr>
<tr>
<td>TRACS</td>
<td>Beedie database - houses course info, staff info and CV's etc.</td>
<td>Bluejeans</td>
<td>Videoconferencing</td>
</tr>
<tr>
<td>Sharepoint</td>
<td></td>
<td>Skype</td>
<td>Videoconferencing</td>
</tr>
<tr>
<td>ChemBioDraw Ultra</td>
<td></td>
<td>Twitter</td>
<td>Social media</td>
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<tr>
<td>FigTree v1.3.1</td>
<td></td>
<td>YouTube</td>
<td>Video</td>
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<tr>
<td>Praat</td>
<td></td>
<td>Flickr</td>
<td>Photo</td>
</tr>
<tr>
<td>IBM SPSS Statistics</td>
<td></td>
<td>WebPA</td>
<td>Peer operated marking of group work</td>
</tr>
<tr>
<td>JMP</td>
<td></td>
<td>iPeer</td>
<td>Peer evaluations /review-release of student comments</td>
</tr>
<tr>
<td>Maple</td>
<td></td>
<td>Google Docs</td>
<td>Sharing documents</td>
</tr>
<tr>
<td>MatLab</td>
<td></td>
<td>Google tools/suite</td>
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<tr>
<td>Minitab</td>
<td></td>
<td>Google Hangout</td>
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<tr>
<td>SAS *</td>
<td></td>
<td>Fluid Surveys</td>
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<tr>
<td>Technology</td>
<td>Description</td>
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<tr>
<td>S-Plus</td>
<td>BB Collaborate Online learning and collaboration platform</td>
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<tr>
<td>SPSS</td>
<td>Knowledge Forum Group workspace</td>
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<tr>
<td>Adobe Acrobat Distiller X</td>
<td>Wikipedia</td>
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<tr>
<td>Adobe Acrobat X Pro</td>
<td>Instagram Social Media</td>
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<tr>
<td>Adobe Content Viewer</td>
<td>Dropbox File storage</td>
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<tr>
<td>Adobe Reader xi</td>
<td>Jabber Messaging system</td>
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<tr>
<td>AptDiff</td>
<td>Explain Everything Design, screencasting and interactive whiteboard tool</td>
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<tr>
<td>ArcGIS</td>
<td>Kindle Reader</td>
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<tr>
<td>Binary Viewer</td>
<td>Camtasia</td>
<td></td>
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<tr>
<td>Ergowatch</td>
<td>Pearson MyLab Online quizzes - integrates with LMS</td>
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<tr>
<td>Eviews</td>
<td>WileyPlus Online quizzes - integrates with LMS</td>
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<tr>
<td>Neutrino Targets</td>
<td>Filemaker Pro Database</td>
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<tr>
<td>PDF Creator</td>
<td>Excel Database/Spreadsheet</td>
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<tr>
<td>R</td>
<td>PowerPoint Presentation software</td>
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<tr>
<td>RAMAS EcoLab</td>
<td>Keynote Presentation software</td>
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<tr>
<td>SmartState</td>
<td>Prezi Presentation software</td>
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</tr>
<tr>
<td>Stella</td>
<td>CQ5/Experience Manager Presentation</td>
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<tr>
<td>VMWare</td>
<td>Adobe Creative Suite Presentation</td>
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<tr>
<td>WinBUGS</td>
<td>Visually Presentation</td>
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<td>WinRAR</td>
<td>Piktochart Presentation</td>
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<td>R64</td>
<td>Audacity</td>
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<td>Grapher</td>
<td>Garageband</td>
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<td>iWeb</td>
<td>iMovie</td>
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<tr>
<td>LayOut</td>
<td>Doccam</td>
<td></td>
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<tr>
<td>SketchUp</td>
<td>Sakai Open source collaboration tool</td>
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<tr>
<td>Blueprints</td>
<td>SFU Wiki</td>
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<tr>
<td>Clockwork</td>
<td>AutoCad</td>
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<table>
<thead>
<tr>
<th>Technology</th>
<th>Description</th>
<th>Technology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adastra</td>
<td>Faculty/staff room booking</td>
<td>Crystal Reports</td>
<td></td>
</tr>
<tr>
<td>Docushare</td>
<td></td>
<td>TMA</td>
<td>Maintenance Management System</td>
</tr>
<tr>
<td>Student Success</td>
<td>Web-based solution: assists in guiding students with their academic goals</td>
<td>Scintra</td>
<td>Delivery tracking</td>
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<tr>
<td>Intrahealth</td>
<td>Appointment scheduling and health records management</td>
<td>FAST</td>
<td>Financial software</td>
</tr>
<tr>
<td>iClicker</td>
<td>Student response system</td>
<td>Docushare</td>
<td>Web-based document management system</td>
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<tr>
<td>Top Hat</td>
<td>Student response system</td>
<td>RID</td>
<td>Research interests database</td>
</tr>
<tr>
<td>Canvas polling</td>
<td>Student response system</td>
<td>Grant Track</td>
<td>Records and manages University grants</td>
</tr>
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<td>Media site</td>
<td>Lecture recording</td>
<td>CV</td>
<td>Repository for personal CV’s</td>
</tr>
<tr>
<td>Electron</td>
<td>Presentation in-class tool</td>
<td>APS</td>
<td>Academic Personnel System - delivery and responsibility for course content</td>
</tr>
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<td>Canvas</td>
<td>LMS</td>
<td>BCCT</td>
<td>BC Campus Transcript exchange system</td>
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<tr>
<td>Moodle</td>
<td>LMS</td>
<td>Blueprints</td>
<td>Web-based registration system for new students</td>
</tr>
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<td>Study.net</td>
<td>LMS</td>
<td>CLASS</td>
<td>Schedule and manage athletic venues and facilities</td>
</tr>
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<td>LON-CAPA</td>
<td>LMS</td>
<td>Clockwork</td>
<td>Scheduling software for Centre for Students with Disabilities</td>
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<tr>
<td>Coursys</td>
<td>LMS</td>
<td>Turnitin</td>
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Appendix L: SFU Documents and Reports Reviewed

The following lists key SFU documents reviewed by the Task Force on Flexible Education, references cited in the discussion document and resources.

*Excludes the numerous documents created by task force members for internal or working group use, informal documents and websites for departments, faculties and units.*


Lifelong Learning, Five-Year Academic Plan 2013-2018


Appendix M: Open Educational Resource Grants

The SFU Library and the Teaching and Learning Centre (TLC) have proposed to focus their small grant programs to support the adoption of open educational resource and open textbooks, in line with Recommendation 5 of the TFFE report.

Open Educational Resources Grants
SFU Library & Teaching and Learning Centre (TLC)
May 19, 2015

The SFU Library and the TLC jointly sponsor small grants to support the adoption of Open Textbooks and other Open Educational Resources (OER) for adoption in SFU courses. These grants support faculty members wishing to redesign courses using OER as primary course materials. OER adoption is one way to address textbook affordability for students, and to encourage local development and adaptation of high quality open resources for use in SFU courses. In addition to the funding provided by these grants, in-kind contributions from the SFU Library and the TLC will assist recipients in locating, evaluating, and adapting high quality Open Resources as an alternative to expensive commercial course materials.

How to Apply

Edibility: Continuing or limited term full-time faculty appointment (including tenured and tenure-track faculty, lecturers and limited term faculty appointments of one year or more) at Simon Fraser University may receive an Open Educational Resource Grant. The intent is to distribute funds to maximize direct benefit to a wide range of student learners and inquiry across a diversity of disciplines.

Application: Three grants of up to $5,000 will be provided to 3 courses per semester. The intent of these grants is to enable faculty members of credit courses to receive support in the identification, curation and integration of Open Educational Resources into their courses. Library and TLC staff time will be provided as in-kind contributions to selected projects while grant funding would support research assistants or students to co-create resources. Proposals may be submitted by one or more faculty members or course teams.

Expectations of Grant Recipients: Complete a project plan with a team (Library and TLC staff, as appropriate) and development of one’s course within the timeline; participate in the evaluation of the effectiveness and process of implementing OERs including on students’ learning; and share your experience with interested colleagues at SFU events or communications activities (e.g. OER panel, news stories, websites, etc.) arranged by the Library and/or TLC.

In-Kind Contributions from Library and TLC Staff: Grant recipients will benefit from the expertise of subject librarians and assistance with adapting and evaluating suitable OER, and the application of Creative Commons licenses. Educational Consultants from the TLC may consult on course design while Learning Technology Specialists and Educational Media staff may assist with integrating OER into Canvas or instructor and/or student co-creation of materials.

Eligible Expenses: Support for SFU student research assistants or co-creators of content; support persons with a particular expertise/skill set not found in the Library or TLC; development of data collection instruments and support for data collection and analysis; and travel for dissemination of findings not to exceed 20% of total award.
Appendix N: Summary of Interviews and Focus Groups

The TFFE project team conducted interviews and focus groups with individuals associated with the Task Force, as well as senior staff, and academic and administrative teams from across campuses.

**INTERVIEWS CONDUCTED BETWEEN APRIL – AUGUST 2014**

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<th>TFFE MEMBERS</th>
<th>ACADEMIC LEADERS</th>
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<tbody>
<tr>
<td>2 Task Force student representatives</td>
<td>3 Deans</td>
<td>2 Executive Directors</td>
</tr>
<tr>
<td>9 Task Force deans, faculty and staff</td>
<td>4 Associate Deans</td>
<td>8 TLC Consultants</td>
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<tr>
<td>representatives</td>
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**FOCUS GROUPS CONDUCTED BETWEEN APRIL – AUGUST 2014**

<table>
<thead>
<tr>
<th>FOCUS GROUPS</th>
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<tbody>
<tr>
<td>Learning Technology team</td>
<td>Health Promotion Team</td>
<td>Centre for Indigenous Students</td>
</tr>
<tr>
<td>Centre for Online and Distance Education program directors</td>
<td>7th Floor Media</td>
<td>International Services for Students</td>
</tr>
<tr>
<td>Centre for Students with Disabilities</td>
<td>Liaison Librarians</td>
<td>Work Integrated learning</td>
</tr>
<tr>
<td>SFU Surrey Management Team</td>
<td>Facilities</td>
<td>Athletics</td>
</tr>
<tr>
<td>SFU Vancouver Management Team</td>
<td>Office of Aboriginal Studies</td>
<td>Lifelong Learning</td>
</tr>
<tr>
<td>Research/Learning Commons</td>
<td>Faculty Teaching Fellows</td>
<td>Hellenic Studies</td>
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**COMMUNITY EVENTS AND FOCUS GROUPS CONDUCTED BETWEEN JANUARY – MARCH 2015**

<table>
<thead>
<tr>
<th>EVENTS AND FOCUS GROUPS</th>
<th>DATE</th>
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<tr>
<td>K-12 Transition Event</td>
<td>January 16</td>
<td>Open to University community</td>
</tr>
<tr>
<td>World Cafés</td>
<td>January 26</td>
<td>Open to University community</td>
</tr>
<tr>
<td></td>
<td>February 2, 17</td>
<td></td>
</tr>
<tr>
<td>Student Focus Groups</td>
<td>March 4, 11, 17</td>
<td>Students</td>
</tr>
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</table>
Appendix O: Response to TFFE Draft report from SFU Library


Response from the SFU Library
15 May 2015

The SFU Library applauds the TFFE for producing a forward-looking report that captures many of the innovative educational experiences already available at SFU, and recommending changes to move SFU toward more relevant and responsive practice. The Library looks forward to active participation in the implementation of several of the recommendations outlined in the draft report, with particular interest in the ones listed below.

- Recommendation 2: There is a critical opportunity for the Library to be involved in the design and delivery of a proposed foundational course on lifelong learning. Many of the topics listed are workshops or classes already offered through the Student Learning Commons, Research Commons, and instructional activity of Liaison Librarians. Basic information literacy should be included in the list of topics for such a course, encompassing not only education in effectively identifying, evaluating, and utilizing information in all formats, but also an understanding of the ethical and privacy aspects of digital information, the scholarly publishing landscape, and students' understanding of themselves as producers as well as consumers of digital information. Librarians should be involved in developing and delivering this part of such a course. The Library should also be actively involved in the planned first-year learning community, leveraging existing curriculum on study skills, time management, reading for university courses, and the like.

- Recommendation 3: The Library's place as a neutral hub at the university makes it an obvious partner to develop and house makerspaces. University libraries on many campuses are actively involved in the creation and delivery of makerspaces; this placement addresses the challenge housing such facilities within departments or Faculties where they may not be accessible to all SFU students.

- Recommendation 5: Library involvement will be a critical success factor in the design and implementation of a digital infrastructure for learning resources. The Library will offer technical expertise in this endeavour, as well as curatorial skill to assist faculty in finding, vetting and organizing an array of open educational resources (OER), including open textbooks and other open educational resources.

- Recommendation 5: Under separate cover, the Library will propose a specific partnership with the Teaching and Learning Centre to support the adoption of OER through small grants and in-kind service from the TLC and the Library.

- Recommendation 6: The libraries at all three campuses provide the most heavily used common student spaces at SFU. The Library and the university have already invested heavily in the renovation, rewiring, and refresh of these student study spaces. The Library is committed to continuing the renewal of these spaces to support flexible learning.

The Library has a role as a key player in implementation of many areas under consideration by the TFFE report. We look forward to partnering with other units on campus to achieve the goals of relevance, flexibility, and responsiveness outlined in the TFFE report.
Appendix P: Discussion Paper – An Infrastructure for Digital Learning Resources

The discussion paper can be found here: http://flexed.sfu.ca/?p=37424
DISCUSSION PAPER: AN INFRASTRUCTURE FOR DIGITAL LEARNING RESOURCES

The purpose of the paper is to engage the SFU community in a discussion about how broader and more integrated access to digital learning resources might enhance the design and operation of programs and courses at SFU. The paper also seeks to identify the potential benefits for students, faculty and the institution associated with the use of an integrated digital infrastructure for learning resources at SFU. We invite your response to this short discussion paper.

CONTEXT

Conversation overheard in the Starbucks coffee line at SFU on Thursday, January 15, 2015, “...this course has a lot of versions and each one has a different textbook. How do we choose? What do I do?”

The choice facing students in this conversation is common as is the choice for faculty and instructors in determining which learning resources or textbooks best fit the learning goals for their course curricula. This paper asks whether there is a new, more agile process for identifying, selecting, assembling and distributing learning resources in digital formats that can support both effective teaching and learning and efficient, low-cost provision of instructional resources for students. The paper also asks whether new practice models that build on open pedagogies, open educational resources (OER) and open textbooks could be more aggressively explored at SFU.

When textbooks were physical printed books students had options: buy new, buy used, share with a friend, read the copies on reserve in the library, or don’t use the textbook at all. With new publisher models being introduced, access codes for password-controlled course resources is a new reality for instructors who choose to use publisher resources with their students. A third option, supported by SFU students (Hill, 2014), is available through open access materials and the BC Open Textbook program.

According to research conducted by Allen (2010) for the Student Public Interest Research Groups (StudentPIRGs), the average US student spends $900 on textbooks each year. At our institution, SFU Student Services recommends that students budget $1000 per semester for books and supplies (SFU Student Services, 2014), which could expand to $2000-3000 per year based on a student’s enrolment pattern. Textbook costs are high and getting higher, and their rise over the past 10 years has been more than three times the rate inflation, according to US data (Jamrisko & Kolet, 2013).

Research from the 2012 Florida Student Textbook Survey (Florida Virtual Campus, 2012), in which over 22,000 students participated, suggested a direct relationship between textbook costs and student choices about which courses to take.

According to a September 2014 survey conducted by the SFU Bookstore (SFU Bookstore, 2014), 35% of students reported they did not purchase required textbooks for their courses. The 2012 annual SFU student survey (SFU, 2012, p. 44-45) reported that only 59% of students purchased all their required materials, with 76% reporting that textbook costs are too high.

A relationship between textbook costs and student decisions about which courses they will take

Changes are taking place in the existing educational resource marketplace as new business and technology strategies emerge. Publishers have created their own learning resource delivery systems, usually based on US servers, which students gain access to directly using purchased codes. E-books and e-readers are also available for mobile phones and tablets. Open textbooks are available to instructors under an open-source license and provide free digital access to learning resources, with low cost printing and customization opportunities. The implications for of these technological developments include changing practices for bookstores (Roach, 2014), and a need to harness digital technology more effectively in teaching and learning to benefit both students and instructors.

StudentPIRGs (2010) research found that textbook affordability solutions must also satisfy a wide range of student preferences:

- Students were split between print and digital – (leaning toward print) - a combination may be best.
- Most students prefer to rent some books and buy some others
- Traditional cost-reducing options (such as used books) only appeal to a subset of students, and therefore cannot reduce much of the overall market cost
- Open textbooks can reduce costs for all students by up to 80% over market pricing, and have potential long-term sustainability

Therefore, any solution that seeks to reengineer traditional instructional resource models must reduce costs and appeal to a wide range of students. Recommendations from the StudentPIRGs (2010) report included the following action pathways, to which we have added some referenced examples:

- Colleges, universities and governments should invest in open textbooks and other sustainable models (e.g. BCcampus, 2015a)
- Faculty should use open and other affordable textbooks when possible (e.g. OpenStax College, 2015; BCcampus, 2015b; Koch, 2006)
- Publishers should develop models that can produce high quality, reasonably priced books (e.g. Algonquin College eText Initiative, 2015)
- Students should spread information about open textbooks (e.g. Hill, 2014)

Some of these action pathways are playing out around us on SFU campuses, and this discussion paper asks whether an intentional pilot project would allow us explore and evaluate the benefits of an integrated digital resource strategy with SFU faculty and students. But there is more that can be done.

Examples of co-creation and localization of instructional resources by faculty teams have been demonstrated within the British Columbia higher education system.

In 2014, a BC Geography textbook “sprint,” in which faculty members from multiple institutions collaborated for a week at the University of British Columbia, produced an openly-licensed first year geography textbook localized for BC students (BCcampus, 2015b). This open textbook is currently available for free to faculty and students in multiple formats including online, PDF and mobile formats for tablets.

An integrated resource solution for SFU should also allow for these types co-creation and localization activities to be initiated by faculty teams, with technical support from the institution’s service units.
OPPORTUNITY

A pilot initiative to explore new learning resource models could address a number of goals at SFU, including:

- Reduce instructional materials and textbook costs for students while providing perpetual access to resources, rather than having them expire after 180 days (which is often the case in publisher provided instructional resource models).
- Provide a technical infrastructure, compatible with Canvas, for faculty to select from digital resource collections that include their own research and instructional resources, open educational resources, open data sets, library resources, publisher textbooks and resources.
- Support multiple platforms and strategies for the distribution of digital resources for instruction including mobile, desktop devices, and on-demand printing capabilities.
- Ensure that Freedom of Information and Protection of Privacy Act (FIPPA) regulations are observed when students gain access to publisher provided online materials.
- Modernize the functions of the SFU Bookstore with respect to procurement of learning resources, the delivery of resources to students and faculty, and payment mechanisms.

The Algonquin College eText Initiative provides one existing model of practice for SFU to consider. Algonquin has been operating an e-text program since September 2013 supported by the college’s Learning and Teaching Services (LTS) team. The initiative demonstrated savings to students of up to 40% during its initial implementation phase with a subset of the institution’s courses. Algonquin is targeting a 100% integration of e-textbooks at the college by 2016, and is using a phased strategy to improve the program, add additional resources and increase integration with existing student and technical services on its campus.

Throughout its process of adopting the integration of digital resources, Algonquin Learning and Teaching Services (LTS) staff worked closely with faculty, students and its bookstore to plan and execute its eText strategy and implementation processes. How might the SFU Teaching and Learning Centre (TLC) be involved in a similar manner to support a pilot project on our campuses?

While the Algonquin model is built on a strategy that works with publisher provided digital resources, the opportunity at SFU could be expanded to support and distribute both faculty-developed resources and open educational resources, congruent with student wishes, and with government directions for OER.

Open access journal resources are available from the SFU Library, and open textbooks from the BC Open Textbook Project. There are also other open digital repositories available across the Internet including OpenStax College, OER Commons, and Washington State Open Course Library, as examples. Therefore, an integrated strategy for SFU could provide a new style of infrastructure and support systems that allow for the assembly and distribution of instructional resources from all viable sources, including:

- Faculty or department developed resources.
- Open educational resources, open data sets and open textbooks.
- Library resources and licensed digital collections.
- Publisher-sourced digital textbooks and ancillary resources.

Designing an integrated resource environment that utilizes multiple sources for teaching and learning resources would also require us to consider a technical infrastructure, tools and service structures to support the approach. Is Canvas the key component of the technical infrastructure, and/or are there other complementary technical options?
POTENTIAL VALUE IN AN INTEGRATED APPROACH FOR THE SFU COMMUNITY

The table below suggests some of the value propositions that arise from an integrated digital resource strategy that combines faculty-developed resources, resources from the SFU Library, the BC Open Textbook Project, and the open commons across the Internet, as well as publisher resources.

<table>
<thead>
<tr>
<th>Faculty or department resources</th>
<th>Open resources</th>
<th>Publisher resources via Bookstore</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teaching resources for SFU students based on research or expert knowledge of the subject</td>
<td>• Available in many subject domains and disciplines</td>
<td>• Available in most subject domains and disciplines</td>
</tr>
<tr>
<td>domain by SFU instructors</td>
<td>• Free to reuse, revise, remix, redistribute, and retain through Creative</td>
<td>• Lower cost for students and price capped at 2% increase per year</td>
</tr>
<tr>
<td>• Updated regularly as a part of teaching function</td>
<td>Commons (CC) license provisions</td>
<td>• All students have access to required resources for courses</td>
</tr>
<tr>
<td>• Malleable and adaptable to SFU students based on their needs</td>
<td>• Collaborative authoring, revising and remixing opportunities to suit</td>
<td>• Retain and print rights provided</td>
</tr>
<tr>
<td>• Maintained and updated by the author/s to meet new needs</td>
<td>existing or emergent student needs</td>
<td>• Latest versions available through digital collections model maintained by publishers</td>
</tr>
<tr>
<td>• Ability for faculty to self publish locally designed resources and teaching materials to</td>
<td>• Positions SFU Library as a centre for collections of open access, discipline-</td>
<td>• Ability for faculty to select individual chapters to produce custom digital course packs</td>
</tr>
<tr>
<td>the SFU digital collection</td>
<td>specific OER</td>
<td>• Privacy regulations respected (FIPPA)</td>
</tr>
<tr>
<td>• Collaborative authoring, revising and remixing opportunities with colleagues to suit student</td>
<td>• Associates SFU more closely with BC Open Textbook Project</td>
<td>• Analytics available for some online resources used for teaching and learning</td>
</tr>
<tr>
<td>needs</td>
<td>• Support for new models of teaching practice</td>
<td>• Tech support provided by via Bookstore staff</td>
</tr>
<tr>
<td>• Localization and customization of resources to better meet the needs of SFU students and</td>
<td>• Support for open pedagogies that include students as co-developers and</td>
<td></td>
</tr>
<tr>
<td>faculty.</td>
<td>co-researchers</td>
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A refreshed Bookstore model

The SFU Bookstore has proposed a new resource delivery system as a way to address digital access and lower resource costs for students. Its key features are outlined using the conceptual illustration below.
An integrated infrastructure for the creation, selection and assembly of learning resources

The bookstore model is aimed at the dominant commercial model of providing publisher textbooks and ancillary resources to students. However, it is important that all sources of learning materials be considered in an SFU digital resource strategy. An ideal architecture would allow for the selection and assembly of faculty provided resources, publisher resources and open resources from across the Internet in a manner that satisfies course requirements and creates an engaging and effective learning experience for students.

Further, the digital resource infrastructure should satisfy the needs of face-to-face, blended and online classroom models and provide connections to resources through the Canvas learning management system (LMS). In addition a virtual digital bookshelf should provide content and ancillary resources to students using desktop computers, laptops or mobile devices.

Extending the functionality of a digital resource infrastructure could also provide feedback and evaluation streams from students and faculty, providing analytics that could be used to better assess the utility of digital resources, as well as identify areas for improvement or the development or acquisition of additional or improved resources.

A digital infrastructure that integrates OER along with faculty and publisher resources would also provide opportunities for localization and customization of resources to better meet the needs of SFU students and faculty, as well as provide a platform for collaboration among faculty or program teams. Co-research and co-creation of learning resources could provide a powerful new strategy for building and improving SFU courses. The “dynamic content authoring process” operated by Williams (2005) at the University of Northern British Columbia and the ChemWiki (2015) project designed and operated by a faculty members from the University of California (Davis), provide excellent examples of practice models that demonstrate an active learning and agile resource development environment supported by both faculty and students.

HOW DO WE RESPOND?

Some specific questions:
1. What could we do in the short term at SFU to explore and evaluate an integrated digital learning resource infrastructure for students, faculty and instructors?
2. Who would need to be involved in an advisory capacity to guide and evaluate the pilot project?
3. How would faculty and instructors be identified to participate in a pilot project?
4. What research and metrics would be key to guiding the pilot evaluation?
5. What resources would be required to conduct a pilot program and its evaluation?
6. Could we conduct the pilot and evaluation process in an agile, iterative manner that would allow us to more broadly implement the successful components as they are identified?

We’d like to hear from you  →  http://flexed.sfu.ca
REFERENCES


References

References included research papers, reports and strategic planning documents of academic institutions, government agencies, and non-governmental organizations worldwide. The TFFE research team sought to include literature published within the past five years to help situate our initial findings within the context of recent research and policy discussions.


Andrews, J., Clark, R., & Thomas, L. (2012). (Eds.). Compendium of effective practice in higher education retention and success. York: Aston University, Birmingham & HEA.


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