SFU
OFFICE OF THE PROVOST
AND VICE-PRESIDENT ACADEMIC

MEMORANDUM

ATTENTION	Senate	**DATE**	November 16, 2023
FROM	Dilson Rassier, Provost and Vice-President Academic, and Chair, SCUP	**PAGES**	1/1
RE:	External Review Report for the School of Interactive Arts and Technology (SCUP 23-36)		

At its meeting on October 25, 2023, SCUP reviewed and approved the Action Plan for the School of Interactive Arts and Technology that resulted from its external review.

The Educational Goals Assessment Plan was reviewed and is attached for the information of Senate.

> **Motion:** That Senate approve the Action Plan for the School of Interactive Arts and Technology that resulted from its external review.

c: Thecla Shiphorst (thecla@sfu.ca)
Carman Neustaedter (carman@sfu.ca)

SIMON FRASER UNIVERSITY   ENGAGING THE WORLD

8888 University Drive, Burnaby, BC   TEL: 778.782.5731   vpacad@sfu.ca
Strand Hall, Room 3000   FAX: 778.782.5876   www.sfu.ca/vpacademic
Canada V5A 1S6

MEMORANDUM

ATTENTION	Dilson Rassier, Chair of SCUP	**DATE**	September 21, 2023
FROM	Peter Hall, Vice-Provost and Associate Vice-President, Academic	**PAGES**	
RE:	External Review of the School of Interactive Arts and Technology		

Attached are the External Review Report and the Action Plan for the School of Interactive Arts and Technology. The Educational Goals Assessment Plan is included, for information only, with the Action Plan.

Excerpt from the External Review Report:
"As noted in the SIAT Self Study, the School has exceptional outcomes in nurturing interdisciplinary research. It has consistently recruited high performing and innovative researchers who join SIAT because they know that their work at the intersections of many disciplines will be understood and supported by collaborative colleagues, favorable teaching workloads, and adequate research labs. All aspects of the School have been designed and continue to evolve to optimize a high level of interdisciplinary research intensity."

Following the site visit, the Report of the External Review Committee* for the School of Interactive Arts and Technology was submitted in December 2022. The reviewers made a number of recommendations based on the Terms of Reference that were provided to them. Subsequently, a meeting was held with the dean of the Faculty of Communication, Art and Technology, the director of the School of Interactive Arts and Technology, and the director of Academic Planning and Quality Assurance (Provost's Office) to consider the recommendations. An Action Plan was prepared taking into consideration the discussion at the meeting and the contents of the External Review Report. The Action Plan has been endorsed by the school and the dean.

Motion:

> That SCUP approve and recommend to Senate the Action Plan for the School of Interactive Arts and Technology that resulted from its external review.

*External Review Committee:
- Elizabeth (Dori) Tunstall, OCAD University (Chair of External Review Committee)
- Marcelo Wanderley, McGill University
- Mary Beth Rosson, Penn State University
- Richard Smith (internal), Simon Fraser University

Attachments:
1. External Review Report (December 2022)
2. School of Interactive Arts and Technology Action Plan
3. School of Interactive Arts and Technology Educational Goals Assessment Plan
4. Feedback on Educational Goals Assessment Plan

cc   Carman Neustaedter, Dean, Faculty of Communication, Art and Technology
       Thecla Schiphorst, Director, School of Interactive Arts and Technology

Simon Fraser University
School of Interactive Arts and Technology
External Review Committee

Authors:
Elizabeth (Dori) Tunstall, Chair of Committee, OCAD University
Marcelo Wanderley, McGill University
Mary Beth Rosson, Penn State University
Richard Smith, Simon Fraser University

Introduction

We thank you for this opportunity to evaluate the School of Interactive Arts and Technology (SIAT) at Simon Fraser University. To develop a broad and balanced description of SIAT, we first conducted a high-level SWOT analysis, organizing our myriad observations obtained through our interviews of a diverse group of stakeholders who spent time with us. The review will begin with the SWOT analysis before focusing on the six questions that we have been asked to provide insight and recommendations.

SIAT STRENGTHS

Interdisciplinary Research
As noted in the SIAT Self Study, the School has exceptional outcomes in nurturing interdisciplinary research. It has consistently recruited high performing and innovative researchers who join SIAT because they know that their work at the intersections of many disciplines will be understood and supported by collaborative colleagues, favorable teaching workloads, and adequate research labs. All aspects of the School have been designed and continue to evolve to optimize a high level of interdisciplinary research intensity.

Interdisciplinary Exposure for Undergraduate Students
The School's value proposition is the exposure of undergraduate students to the histories, principles and practices of art and design, media, and digital technology. Many institutions approach interdisciplinarity by having students in specialized different fields collaborate with one another on projects. While SIAT students do eventually specialize, each one leaves with a deep appreciation for the other fields in which they have not specialized. This gives SIAT students a unique profile within the local job market compared to graduates from surrounding institutions.

Cooperative Program
The SIAT cooperative program is highly successful in creating opportunities for students to undertake experiential learning with local businesses. It has an extensive network of employment partners across a variety of sectors and a 38% student participation rate, with opportunities to grow that number in the future.

Governance
The high autonomy in decision making at the multiple levels of the institution was consistently noted in conversations with faculty and staff. This autonomy has enabled people to feel confident that they can guide their own direction as a School, especially as the interdisciplinary praxis requires significant adaptability to be maintained.

Highly Competent Administrative Staff
While the administrative staff is small, these individuals are highly competent in running the school. There is risk in terms of the loss of a significant administrator and a few areas that might need reinforcing in staff (including marketing and communications and studio technicians). Yet, many of the staff are cross-trained in other administrative functions, which means that the office runs effectively and efficiently as tasks can be shared during the ebb and flow of the academic year.

Growing Equity for Teaching Faculty
SIAT's teaching faculty subsidize the teaching loads of research faculty, which enables the research faculty to spend more time on research activities, resulting in high productivity and academic success. While their contract limits the recognition of their research and practice (some of which is at the international scale of recognition), SIAT has recognized their deep knowledge and leadership by creating pathways for teaching faculty to take on greater administrative leadership. This should be further encouraged, especially as teaching faculty are best positioned to drive the changes needed to create a more inclusive, diverse, and decolonial curriculum because collectively they teach the majority of the undergraduate courses.

SIAT WEAKNESSES

Spaces and Facilities
As outlined in the self-study, SIAT's spaces are no longer adequate for the number of students in the School and for the shifts in students' focus towards design. At the macro-level, this relates to the lack of residential spaces for students, which is exacerbated by government policies that prohibit funding in loans or grants for residential capital projects. Overall space utilization in the building can be improved to reflect that students commute to campus, for example perhaps considering alternative uses for spaces in after hours, weekends. Increased open studio spaces when classes are not in session may also be possible. There can also be greater reflection of curricular needs for wet or messy rooms in the assignment of teaching spaces.

Specific to the School, the single fabrication lab staffed part-time by one technician does not provide adequate support for the culture of making at both the undergraduate and graduate levels. The lack of fabrication space limits further growth in undergraduate students drawn to design and making activities. The design-focused research labs are often required to have their objects fabricated overseas or at Emily Carr.

In regards to the research labs, the process of allocation is unclear in terms of the criteria used to make decisions regarding size, equipment, student allocation, and sharing versus single

researcher use. We recognize that some labs are in transition, but there seemed to be evidence of underutilization of some areas but intense use of other areas.

Interdisciplinary Curriculum for Undergraduates
As noted in the self-study, there are large questions about the interdisciplinary curriculum in the School. Some faculty and students spoke about an ongoing shift away from computation as the core of the undergraduate program to design, with opposing views as to the criticality of that shift. The course structure seems highly prescriptive, with many required courses, especially in the first two years. Yet, the greatest indication of the weakness of the interdisciplinary curriculum is that it does not prepare students to be accepted and flourish in SIAT's own graduate programs. Research faculty spoke of one or two exceptional students who might be ready to work in their labs, but did not see this as a possibility for the majority of the undergraduate student body.

Decolonization and Diversity, Equity, and Inclusion in Hiring and Curriculum
The anti-racism statement and Strength in Diversity ethos expressed in the self-study are revolutionary in their boldness. They articulate the hard work that the institution will need to undergo to give those words tangible form in the faculty complement, the curriculum, and the research for which the School is known. And yet, the "research star" culture of the School poses a barrier for reaching those goals for two reasons. First, the population of Indigenous and Black scholars with PhDs and all the accouterments of high academic performance is limited; this makes recruitment of such individuals highly competitive with other Canadian universities. The many years it took to successfully recruit SIATs first Indigenous full-time faculty member indicates the challenges the School faces. Second, the most successful model for achieving decolonization and DEI, demonstrated by OCAD University, has used cluster-hires of three to five individuals from a specific group to achieve a critical mass of Indigenous, Black, Asian, South Asian, Latinx, and Middle Eastern faculty; this group of faculty then lead the decolonization and diversification of the curriculum. SIAT does not have enough open faculty lines to undertake a cluster hire process at this scale.

Interdisciplinary Research and Graduate Studies
While SIAT's research outcomes are exceptional, there are three weaknesses that emerged from the discussions and observations. The low applications of domestic students limit the use of Canadian Tri-Council Funding and thus leads to an overreliance on international graduate students, which leads to financial hardship for them. The time of completion for graduate students is longer than institutionally desired due to the imbalances of (1) the high cost of living in Surrey versus low graduate stipends and (2) supervisory issues of timely funded projects and skills to project misalignments. Lastly, the ethos of pure research culture disincentivizes the commercialization of research as an additional income stream for the School, although work is being done to address intellectual property policies and other issues.

Marketing and Branding
The nested relationship of the School within a Faculty and the Faculty within the wider Simon Fraser University means that it is difficult to achieve visibility or have a large enough advertising

budget to promote SIAT as a distinct opportunity. Given that social media and the School website are the primary marketing tools, the message of interdisciplinarity is not effectively communicated through those channels, as they tend to focus on individual student or faculty profiles. There are students who come to SIAT not wanting to learn how to program, which means the brand is not well understood.

SIAT OPPORTUNITIES

British Columbia Location
Being located in British Columbia provides many opportunities for SIAT, some of which have not been adequately explored by the School. Being on the Pacific West Coast, there can be stronger connections to the Asia-Pacific region in research, industry, and student exchange partnerships. Currently, there is a predominant focus on recruitment and collaboration with the United States and Europe. Sixty percent of British Columbia is forested. It is a missed opportunity that so few research projects within the School focus on forestry and the role that interactive technologies can play in monitoring or protecting the forests.

Surrey Location
SIAT is fortunate to be located in Surrey, the fastest growing area in British Columbia. There are many new industries and academic satellite campuses moving into the area. Interactive arts and technology play important roles in the top industries in Surrey, which include advanced manufacturing, supply chain as the city is a logistical hub, clean energy, agriculture, and health care. Health care is the only area represented in SIAT's research areas. The School itself is centrally located near City Hall, the library, the train station, and other municipal structures, opening up opportunities for partnerships. The planned addition of a medical school raises exciting new opportunities for technology-mediated medical research, from diagnosis to intervention and continued care.

Diverse Populations
The city of Surrey has an exceptionally diverse population with the representative heritages of:
- 38% South Asian
- 31% European
- 11% East Asian
- 10% South East Asian
- 02% Indigenous
- 02% African
- 02% Middle Eastern
- 02% Latin American

There are opportunities for SIAT to build out its diversity in faculty and student complements by recruiting directly from this diverse population.

Retirements

The School is undergoing a generation shift as a large number of originating faculty prepare to retire. Faculty complement renewal presents opportunities for hiring lines to support diversity cluster hires and strategically reshape the competencies of the School.

SIAT THREATS

Government Underfunding of the Higher Education Sector

At the macro-level, the main threat outside of the School's control is government underfunding of the higher education sector. The CBC reported in March 2022 that the percentage of government funding in B.C. higher education budgets dropped to 50% from an original 80% twenty years ago. While the British Columbia Government is currently undertaking a review of its funding formulas, chronic underfunding of the higher education sectors has led to universities needing for find additional revenue streams and a higher reliance on international students.

High Cost of Living in British Columbia and Surrey

According to livingcost.org, the average cost of living in Surrey is $1,950 per month. This is in the top 8% of the most expensive cities of the world. The median after-tax salary is $3,738 per month, which covers about 1.9 months of living expenses. The average Simon Fraser University graduate student salary is $1,928 per month, which means for most graduate SIAT students, their salary will fall short of covering the basic cost of living. As a result, the graduate students often take on additional jobs, which slows down their time to graduation.

Interdisciplinary Perspective Is Not Unique Anymore

SIAT has staked its reputation on its interdisciplinarity, yet the academic landscape has shifted such that interdisciplinarity is more common. Of Canadian universities, the list below includes a few that have competitive offerings to those of SIAT:

- Carleton University offers a degree in Interdisciplinary Science and Practice, with science opportunities in bioinformatics, linguistics, nanoscience, geomatics, and psychology.
- Lakehead University offers a degree in Interdisciplinary Studies, with an opportunity to major in Media, Film, and Communication Programs
- University of Guelph offers a interdisciplinary Bachelor of Arts and Sciences, in which students complete an arts and science core, and then select two specializations, with options including applied geomatics, computing and information science, culture and technology studies, media and cinema studies, and studio art and theatre studies.
- Capilano University offers a Bachelor of Arts with a Major in Interdisciplinary Studies.
- Queen's University offers interdisciplinary programs combining two or more academic programs including Computing, Film and Media, and Arts Management and Leadership.

Competition From Other Local Universities

In terms of the sub-disciplines that contribute to SIAT's interdisciplinary identity, other local universities provide competition for students. The largest threat is the University of British

Columbia's development of a satellite campus in Surrey, which would offer arts and sciences courses which might compete with SIAT.

The SWOT analysis has provided a contextual backdrop by which we offer further observations and recommendations. The intersections of the SWOT frames how we approach strategies to make use of opportunities by building on SIAT's strengths and address weaknesses; similarly we offer ideas for mitigating threats by considering these strengths and weaknesses. In the following we shift to the focus questions provided as a guide to the external review.

Focus Questions, Observations and Recommendations

In the charge given to us at the start of the review, we were asked to focus on six primary questions, and to provide observations and recommendations in response. In this section we present these questions followed in each case with our insights and suggestions.

1) Interdisciplinary Balance

What strategies can support the continued development of our interdisciplinary research and academic programs that balance content specialization and interdisciplinarity over the next ten years?

SIAT is already interdisciplinary in its character, as can be seen in the courses offered from multiple disciplines (visual and media design, software systems, ethnographic and other field studies). Students are able to choose coursework and to join projects in these different areas and by so doing enhance their own interdisciplinary thinking. Faculty and staff are clearly committed to an interdisciplinary approach to their work. However, most of the collaborations in place appear to be situated within one discipline or another, although there have also been a few large projects over the years that more explicitly combine disciplinary perspectives.

Recommendation 1: Seek new opportunities for larger and more integrative projects (both in research and education) that may help to crystalize and reinforce the shared commitment to interdisciplinary research and education.

We also note that specialization and interdisciplinarity can be seen, to a certain extent, as antinomic. Both options should be made available for students who might choose one or the other according to their own academic interests and skills, as well as their vision for work opportunities or future studies. Though it is possible to offer both options at the beginning of a degree, it seems natural that students feel forced to choose between the two when progressing toward the end of their degrees.

Recommendation 2: Implement more effective communication strategies to highlight the advantages and limitations of interdisciplinarity and specialization. Clearly indicating the

opportunities provided by each option could reduce students' stress due to fear of "not having enough specialization" when arriving at the end of their degrees, as heard from students during the interviews. The key factor in a successful job application might not necessarily be the courses one has taken, or the title of the degree obtained but the knowledge gained by each individual through their own portfolios and experiences (e.g., programming skills developed in course and thesis projects, as well as in internships). In other words, the education outcome will be what the student makes out of the opportunities offered by the degree.

2) Diversity, Equity and Inclusion and Governance

How can we improve our governance to better support equity, diversity, and inclusion (DEI), including decolonizing and indigenizing our research and curriculum?

It is important that SIAT frames diversity, equity, inclusion, and decolonization as governance issues. The reason why there is the need for DEI and decolonization initiatives is that hegemonic governance structures have favored a narrow group of white, affluent, heterosexual, Judeo-Christian, cis-men as the ones making decisions in autocratic ways with outcomes that have been harmful to those who were not them.

SIAT already knows that it needs to hire more diverse faculty, staff, and administrative leadership. The recommendations below focus on strategies for how it might do so and some contextual requirements for success:

Recommendation 1: Lobby the University to conduct group specific cluster hires just within SIAT at a minimum of three individuals per equity seeking group that SIAT wants to embrace. Using the British Columbia Human Rights Tribunal's Special Programs to conduct closed searches, the clusters should be inclusive of both categories of research faculty and teaching faculty. The research faculty are necessary to lead the changes in research. The teaching faculty are necessary to lead the changes in curriculum. The minimum number of three provides a safe sub-cultural grouping with enough internal diversities to be intersectionality inclusive. Clusters of three or more have also proven to be an effective retention strategy, in which diverse faculty stay because of the community that has been built.

The prioritization of groups for the first three years might reflect both larger social and local commitments to diversity:
- Indigenous first, with perhaps a focus on teaching faculty to complement the existing research faculty, including one at a senior level who can also take on administrative leadership within the School in building relationships with local Indigenous communities.
- South Asian, given the large demographics of peoples of South Asian heritage in the area and students of South Asian heritage in the School.

- Black, to directly address historical underrepresentation and provide opportunities to connect with local and international Black communities.

Other equity-seeking groups should be added over a five to ten year period with the intent for there to be at least two faculty for every equity-seeking group to avoid tokenism.

Recommendation 2: All criteria of faculty and staff evaluation should take into account the structural exclusion of many diverse groups from the post-secondary sector. Thus, equivalencies should be created for those who did not have higher degrees and have other means of demonstrating, on the academic side, the ability to transmit knowledge from one group to another, the skills to prepare proposals and gain funding, and the processes to disseminate knowledge widely outside of the post-secondary context. See the work of OCAD University and its equivalency charts below for reference.

Recommendation 3: If SIAT is going to hire diverse research *and teaching* faculty, it needs to ensure that teaching faculty have equitable opportunities for support of their scholarship of learning and teaching to that of research faculty and for academic leadership within the University. This includes equitable monetary awards and grants, opportunities for promotion within the ranks, and recognition for their achievements.

The goal of decolonization and DEI is to change the decision making within the School to ensure that all decisions create opportunities for all faculty, staff, and students to bring their full selves into the institution and the communities whom they embrace to flourish.

3) Interdisciplinary Undergraduate Education

What strategies can we use to consider structural challenges related to the interdisciplinary nature of our undergraduate program?

When SIAT first formed, the relationship between digital technology (i.e. computation), media, and design was not as integrated as they are today. Undergraduate students today are digital natives for whom media experiences and design objects and interactions have been fully integrated with digital technology. This changes the underlying assumption as to why and how the three interdisciplinary competencies at SIAT (computation, media, and design) interact. For youth today, there is only "computational media" and "computational design". The current curriculum treats computation as something still separate from media and design. And given the perceived or actual difficulty of learning to code, students and faculty speak of students opting out of courses that build their computational skills.

From the interviews and observations, it seems that a key differentiator of SIAT's undergraduate curriculum is its ethos and intense focus on co-creating ethical computational experiences of media and/or design to benefit people and the environment. The structures of the undergraduate curriculum could better support that ethos and focus by reframing its purpose

and intent to strongly motivate students to learn to code as well as adding more flexibility to encourage experimentation.

Recommendation 1: Meet the students where they are as pure digital natives. In the first year, the curriculum might focus on critically dismantling their lived experiences with digital consumption of media and design. This will provide an impetus for the students to learn to code to address the harms people and the environment have experienced due to computational media and computational design. The second year might focus on helping them to develop the technical skills to hack the code of their digital experiences. The third year might focus on refining their conceptual ethics and deepening their technical skills to re-code media and design experiences. The final year culminates in the full manifestation of their ethical re-coding of the digital experiences of media and/or design as applied to specific areas of social, cultural, and environmental benefit.

Recommendation 2: Consider an alternative framework in the program that has three streams of knowledge related to Ethics, Computation, and Experiences (digital) to reinforce the main ethos of the program. Existing courses might be mapped to that framework to determine if they are aligned to that ethos, are scaffolding knowledge in those three areas, and expose gaps that support the creation of new courses, especially those adapting a decolonizing approach:

	Ethics	**Computation**	**Experiences**
Year 1	*Course(s) that focus on:* the negative impact of computational experiences (ex. biases, sustainability, and exploitation)	*Course(s) that focus on:* the history, power, and beauty of code and coding	*Course(s) that focus on:* how everyday digital objects and screens are co-created and consumed
Year 2	*Course(s) that focus on:* the affordances of technological code parameters (i.e. How does technology encode values?)	*Course(s) that focus on:* hacking and deconstructing existing code to learn how to code	*Course(s) that focus on:* how inclusive media and storytelling is co-created and consumed
Year 3	*Course(s) that focus on:* who are communities and collectives bringing alternative values and encoding them in computational experiences	*Course(s) that focus on:* refining diverse systems for coding inclusion	*Course(s) that focus on:* how the support of sensorial bodies (human, animal, plant) is co-created and consumed
Year 4	*Course(s) that focus on:* encoding your own values for positive impact	*Course(s) that focus on:* building competencies in specialized coding skills to make conceptual experiences come alive	*Course(s) that focus on:* how to regenerate the natural world

The Ethics-Computation-Experiences framework adds more structure to the current "paths" used to guide students through the program focused on one area of specialization (e.g., web development, visual design). For students who arrive with or soon adopt the goal of a more specialized education, the sequence of supporting courses, especially those related to the wide range but general paths of either computational media or computation design, would be made more explicit in the advising they receive (and perhaps on the website as well). Many programs offer "certificate" programs to convey a level of specialization along with the general degree, and this is a possible direction to consider.

Recommendation 3: Introduce more flexibility through alternative course structures, such as intensive crash courses that offer a taste of different subjects. Some of the years in the current curriculum, especially year two, seem packed with mandatory courses, and thus, do not allow for experimentation. To create conditions of low-risk exploration and experimentation, one might offer umbrella, or shell, courses, consisting of three 1-credit course units to be chosen by the students from a pool of intensive 1-month crash courses summarizing the crucial aspects of current 3-credit courses offered. Such a "tasting menu" course would allow students who wish to try subjects from other areas to do so without the cost of engaging in a full one-semester, 3-credit course. This approach could mitigate students' feelings of not being prepared and reduce the stress around interdisciplinary studies, a practical barrier that keeps students "safely" inside their disciplines to maintain high GPAs. Such a structure should be easily implemented vis-à-vis the instructors, as preparing for such crash courses would mostly consist in summarizing their existing lecture material. The issue might then be how to credit such courses to their workloads, but it could be as simple as 3 crash courses taught being the equivalent of one full 3-credit course.

4) Preparation of Graduate Students

How can our graduate program develop clearer curricular pathways to meet the needs of both research and project-based students to be well prepared for the research or industry opportunities after graduation?

There is an important reframing that is necessary in regards to the proposition that research and industry are separate pathways for graduate students. Industry engages in Research & Development through their labs and centres with outcomes in patents, papers, and policies that rival academic institutions. Thus, the distinction that SIAT ought to be making is one between research for academic knowledge creation and research for industrial or community application and commercialization. The project-based master's degree should deepen the connections between industry and community such that SIAT graduate students will find employment outside academic institutions as well. Yet the original framing of the question speaks to a potential institutional bias towards "basic research" although much of the research that happens in SIAT has clear industry and community applications. We understand that intellectual property and commercialization policies are currently in development at the University-level. The codification

of protocols will help the School feel more comfortable with the multiple "research" trajectories that its graduate students will take based on the depth and problem set seeking to be solved.

Recommendation 1: Ensure that School minimizes the development of a hierarchy between students enrolled in project-based programs and those enrolled in academic research-based programs. Each approach has its own distinct merits and weaknesses.

Recommendation 2: Establish an industry board to support the project-based program. Members of the board would commit to providing guest lectures in graduate courses and to specify real world problems that are of interest to the companies but also could be used to fulfill the capstone requirement. The recruitment and training of staff who mediate these relationships will also be important. The SIAT cooperative program already has staff who have established great relationships with local and regional businesses. Drawing upon their database and relying on the relationship management skills might accelerate the creation of an industry board as well as deepen SIAT's connections to Surrey's and wider British Columbia's major industries.

Recommendation 3: Create one or more low credit courses shared between academic research masters students, project-based masters students, and upper level undergraduate students that focus on professional practice in industry. Most of the current graduate courses are shared by research masters and doctoral students. This is a strength, as it sets up a natural path for masters students to move into a Ph.D. program, either prior to or after completing their Master's degree. The shared course would open all segments to the hiring landscape in industry and how they might tailor their students to align with those possibilities.

Recommendation 4: Reduce the overall number of courses required in the graduate program. Our interviews suggested that doctoral students believe that too many courses are required in the graduate program. There should be zero- or low-credit degree options for doctoral students who already have a related master's degree. Reducing the course requirements for research-based graduate students may allow them to enter into richer and more rewarding research engagements, including time to develop collaboration with peers in other laboratories or research areas to support further interdisciplinarity.

Recommendation 5: Broaden evaluation criteria for the assignment of teaching assistants and ease of movements across labs and supervision for graduate students. We noted that graduate students who need funding through teaching assistantships tend to be evaluated by GPA initially, and with other output like publications considered later in the program. The Graduate Program may want to consider applying the same more varied and flexible metrics that it has been developing to evaluate its interdisciplinary faculty to decision-making about financial support for graduate students. Given the interdisciplinary nature of the Graduate Program, it would be important for students who might feel siloed in a certain laboratory or area because of funding specifics (e.g., being supported by funds from one researcher and therefore feeling exclusively tied to this researcher's lab) to be able to cross-collaborate with other labs. Similarly, the level of co-supervision between researchers seemed low if compared to other institutions

which foster interdisciplinary research. Co-supervision could be encouraged and rewarded, particularly when it arises from requests made by the students.

Recommendation 6: Identify equitable ways to financially support graduate students (especially international ones) and to lobby for the subsidization of their cost of living in other areas besides rent. Faculty and graduate students have raised the challenges posed by the high cost of living in Surrey and the uneven distribution of stipends and grants on especially international graduate students. While there are limitations on Provincial funding for international graduate students, SIAT high research intensity might enable it to explore corporate funding for international students, especially if the research programs align with local and regional industries.

5) Faculty Renewal

Looking at the disciplinary and diverse nature of our faculty, what areas would you recommend that we focus on in renewing our faculty complement?

The intergenerational shift due to pending faculty retirements at SIAT introduce the opportunity to renew the focus of SIAT's faculty complement. In complement to diversity for equity-seeking groups, there are three general directions in which SIAT can build greater diversities in the complement:

Recommendation 1: Align the research focus for new hires with local and regional strengths of Surrey and British Columbia including growth in the fields of healthcare, agriculture and forestry, and advanced manufacturing. SIAT should explore opportunities for faculty renewal that a) build on the current interests in working with local partners and contexts; and b) envision new directions in technology, especially for healthcare that could establish partnerships with the forthcoming medical school. Note that the Associate Vice Provost for Research intends for each medical school faculty member to also have an affiliation with a home department. SIAT may wish to investigate and pursue such affiliations. Land-based research using design and media technologies to monitor and manage sustainable agriculture and forestry provides the opportunity to integrate decolonial practices into these areas. SIAT researchers are already engaged in the questions of advanced manufacturing, yet the labs are not directly connected with local or regional industries.

Recommendation 2: Maintain a proportional balance between senior, middle, and junior faculty. A danger in faculty renewal is that all senior retirements are replaced with junior faculty members. It is important, especially in addressing diversity, equity, and inclusion, to have new hires at senior, middle, as well as junior levels. SIAT is currently seeking to fill a prestigious Tier 2 CRC Chair position, perhaps with a more senior-level faculty member. The focus area for this chair is technological change for inclusion, inviting applications from individuals whose research aims to create opportunities that foster inclusion, justice, equality, equity, and wellbeing through critical uses of emerging technologies. This seems to be an excellent opportunity to advance the

school's goals of diversity, equity, inclusion and decolonization. With the recent recruitment of an Indigenous scholar, there may be an opportunity to build on that success with a more senior hire.

Recommendation 3: Build deeper international relationships with Asia-Pacific. In discussing the work of the research labs, the majority of international partnerships are with universities or corporations in the United States or Europe. Given the kinds of advances in computational design and computation media in Asia, it is important for SIAT to have deep relationships with institutions there in addition to its current partnerships.

6) Infrastructure

What strategies might we implement to rethink our environment including our spaces, equipment, and online resources to address the inevitable changes in our program for the next 10 years?

SIAT shares similar challenges of most public institutions in terms of the lack of adequate space for its student and faculty bodies, the need for the constant renewal and equitable distribution of equipment, and the integration of online and hybrid delivery in its pedagogical offerings. With assumptions of student and net faculty growth which are necessary to meet expanding operational costs of the School, over time these challenges will be exacerbated.

Recommendation 1: Develop civic partnerships to expand the space available for SIAT through co-sharing. Given the physical limitations of the current facilities and the increased interest for local collaborations, new directions for infrastructure might be created in partnership with other organizations that serve the public trust. The ability to leverage existing buildings and resources in the Surrey locale, for example public libraries or museums, creates synergies that bring SIAT students and faculty in direct belonging and service to the local community. According to our conversations with administration, these partnerships are already being explored. Our recommendation seeks to endorse those ongoing conversations, especially in regards to expanding maker spaces and land-based laboratories.

Recommendation 2: Create open and common lab spaces and equipment sharing for intensified interdisciplinary research activities across individualized labs. Though most of SIAT's research laboratories are of a high standard, thanks to several individual CFI Leader Opportunities Fund, they seem to only cover the needs of an individual or small group of researchers. This might be a limitation of the program with respect to interdisciplinary research: the lack of common spaces that can be used by anyone not associated with a given researcher. Such widely shared infrastructure can be a structuring factor in the ongoing quest for interdisciplinarity, such that staff and students have equal access to space and equipment in pursuing their research goals. This could be achieved by a CFI Innovation Fund application of a few to several M$, explicitly focusing on fostering the integration of the individual areas in the

school. Such application, when openly discussed with the various stakeholders, can craft a vision for the next decade, focusing on building on, and tying together, the main strengths of the school.

The larger shared lab currently available (room 3800, which seems to host some older equipment, e.g., Vicon system 8 or equivalent) could be re-designed to provide a shared laboratory space and a pool of equipment available for research to be potentially used by many SIAT members. Apart from improving collaboration, this could also reduce the duplication of resources by time multiplexing the use of equipment (e.g., the large number of VR headsets in SIAT that might not be used often in one given lab and which will eventually need to be replaced to catch up with novel technological developments).

Recommendation 3: Intensify the exploration of online education for remote and online delivery, especially in courses where the pedagogy is optimized by being online. Given the experiments in remote learning due the Pandemic, it would be useful to conduct an audit of pedagogical activities optimized by being delivered face-to-face, hybrid, remote synchronously, and remote asynchronously. The new project-based masters may be worthy of exploration in regards to online learning, as it would open SFU and SIAT offerings to students beyond the Surrey environment (with its acknowledged issues regarding space and cost of living). Other ways of learning might be optimized online when it matches industry practice. For example, the community of coding and the building of coding skills is often mediated through purely remote modalities. Could SIAT draw upon these affordances to build online courses in coding?

CONCLUSION

The external review committee would like to thank all the faculty, staff, students, and administrators for their openness in allowing us to better understand and address the challenges that they are facing. We recognize that you have already thought of so many solutions to your challenges and thus want to support those ongoing directions. We also hope that we have been able to bring insight and additional thinking to problem and solutions sets that you have not considered. We think that SIAT is an extraordinary institution, which has accomplished great things, and thus we are eager to see how it evolves.

EXTERNAL REVIEW – ACTION PLAN

Section 1 – To be completed by the Responsible Unit Person e.g. Chair or Director			
Unit under review	**Date of Review Site visit**	**Responsible Unit person**	**Faculty Dean**
School of Interactive Arts and Technology (SIAT) ………………………………………………	October 26 – 28 2022 ………………………………………	Dr. Thecla Schiphorst ………………………………………………	Dr. Carman Neustaedter, Dean FCAT **……………………………………….**

Notes
1. *It is **not** expected that every recommendation made by the External Review Committee be covered by this Action Plan. The major thrusts of the Report should be identified and some consolidation of the recommendations may be possible while other recommendations of lesser importance may be excluded.*
2. *Attach the required plan to assess the success of the **Educational Goals** as a separate document (Senate 2013).*
3. *Should any additional response be warranted, it should be attached as a separate document.*

1. PROGRAMMING

1.1 <u>Actions</u>

1.1.1   SIAT Undergraduate Program:

1. <u>**Design and implement our 5-year Undergraduate plan to restructure and revitalize our Undergraduate Curriculum**</u>

- **Preamble: Restructuring Curriculum**
  The SIAT External Review made recommendations to "*consider an alternative framework or structure to our Undergraduate Curriculum*", and to "*introduce more flexibility through alternative course structures*" creating conditions of low-risk exploration and experimentation. Additionally, our SIAT Self-Study gathered focus-group undergraduate and alumni data about the successes and challenges of our curriculum which mirrored the strengths noted by the External Review around interdisciplinarity, but also highlighted the challenges and needs of greater flexibility within our undergraduate curriculum. As the External Review reported "a key differentiator of SIAT's undergraduate curriculum is its ethos and intense focus on co-creating ethical computational experiences of media and/or design to benefit people and the environment". As a result of our acknowledgement of this feedback we are moving forward with strategies for substantive curricular change. These Curricular changes explicitly address the External Reviewers Undergraduate Program Recommendations # 2 and #3.

- **Curriculum Preliminary Design and Implementation Planning**

  For the last 15+ years, SIAT's Undergraduate curriculum structure has changed only marginally. The current structure consists of two orthogonal components: 24 units from a specified BA/BSC list of courses (mandatory) and three concentrations (optional). The concentrations were originally mandatory to provide depth in an area of specialization. However, the wide range of courses within each concentration only partially met this goal. By adding courses into concentrations over the years and redesigning some of the courses, the learning outcomes of the current concentrations are unclear; they are not explicitly stated, and as a result, they are not a part of the curriculum revisioning process, and they cannot be updated and kept current. It appears that the structure itself limits the evolution of the curriculum. Not surprisingly, the faculty view has shifted away from concentrations into seeing the SIAT graduate profile as quite fluent across the disciplinary areas within the SIAT program, and this has also been recognized in our External Review. Existing concentrations also constrain new faculty members.

  On the other side, some positive roles for the concentrations have been identified by students and the broader SIAT community. The concentrations 1) provide more concrete language to externals bodies, i.e., industry and high schools, than the larger "interactive arts and technology" container, 2) they serve as an identity and internal community forming construct (e.g., "design students" or "games students"), 3) by being explicitly listed on transcripts give students an additional credential that may increase their competitiveness, and 4) they allow for preferential enrollment of 'concentration' students into courses to facilitate degree completion (albeit this is for an optional requirement only).

  SIAT is putting together a proposal to address shortcomings of existing structures while maintaining its valued components. In addition to reimagining structural revisions to support change we are also committed to revitalizing the content and relevance of our curriculum in light of FCAT's and SFU's What's Next Strategic plan. In the last year, SIAT has welcomed 3 new faculty members including one indigenous faculty member and is in the process of hiring 2 additional faculty members, one as a CRC Tier 2 Chair for Technological Change for Inclusion. Their participation in our curriculum renewal will be an important resource in supporting and enlivening SIAT's curricular revitalization, and include themes such as Indigenous Computational Creativity, Ethics and AI and Imagining Co-Creation Technologies in Collaboration with Publix.

  Although SFU has no formal definition for the "concentration" credential, the following guidance was shared by SFU's University Curriculum & Institutional Liaison office (UCILO:

  > "For SIAT, where the major is 30 upper division units (typically 10 courses) [we suggest] that a concentration would be well suited at 9-12 upper division units or 3-4 courses (30-40% of the course requirements) or a combination of lower and upper division courses with a higher unit count."

- **Actions: Undergraduate Program Restructure**
  As a key Curricular set of Actions, we are proposing to design and implement structures that can support the renewal our UG curriculum using the following processes for decision-making:
  1) Establish principles for creating, maintaining, and eliminating concentrations from the curriculum in a more flexible manner.
  2) Redefine the lower-division structure to support the upper-division structure.
  3) Establish principles for creating, updating, and eliminating courses in the curriculum.
  4) Define a transition process from the current curriculum to the new structure.
  5) Implement changes to the curriculum structure by defining new concentrations, revising existing courses, and creating new ones, with consideration of reducing courses with low enrolment/interest in the UG program to reduce teaching demand.
  EXPECTED COMPLETION DATES:
    - SIAT Faculty UG Curriculum Planning Workshop: Summer 2023
    - Initial Curricular Structural Proposal Ratified: Fall 2023
    - SIAT Undergraduate Curriculum Retreat | Exploring Alternative Concentrations: Fall - Spring 2023
    - SIAT Design of Alternative Concentrations (on a rotating basis): Fall 2024 – Spring 2025
    - First Wave of Curricular Concentrations Iterated and Passed in Senate (on a rotating basis): Fall 2025 - Fall 2027
    - Evaluation of new Concentrations and Program Based Learning Outcomes (ongoing): Fall 2025 – Fall 2028

2. **Increasing Efficacy and Enrolment in the Undergraduate bridge to SIAT Accelerated Masters**

- **Preamble: Accelerated Masters**
  As a result of an Action in our last external review (2014), our accelerated master's option is a new path that allows <u>undergraduate students</u> at SIAT to bridge into our graduate program, therefore completing their master's degree more quickly while also increasing domestic student numbers in our Graduate Program. The SIAT accelerated masters was passed in the SIAT Graduate Caucus in Spring 2020, and its first intake was in Fall 2021. Our External Review noted that our current undergraduate curriculum does not prepare students well enough to be accepted and flourish in SIAT's own graduate programs. To date, we have had 1 student enroll in the accelerated masters. The experience of this student's enrollment uncovered a set of unnecessarily complex administrative processes due to ambiguous narratives. SIAT does not yet have exemplars of accelerated masters success stories in SIAT, which when coupled with a lack of clear communication strategies, timelines, and pathways to success, means that the accelerated masters has not triggered much student awareness or interest. We need a stronger narrative and more explicit bridge between the Undergraduate and Graduate programs, which administratively have been governed through distinct and separate processes.

- **Actions: Strengthening SIAT Undergraduate Bridge to Accelerated Masters**
  Actions that can support a more viable accelerated masters' program require internal shifts between SIAT academic programs. For example, SIAT notes that the newly inaugurated Project Based Master's (PBM) program which started in Fall 2022 can open many new possible pathways to enable undergraduate students to partake in the SIAT PBM Masters' program. SIAT will:

  - explore collaboration between the Undergraduate and Graduate programs <u>to explore pathways and timelines for success</u> for the accelerated masters' program.
  - explore how <u>mentorship</u> can create more visibility and opportunities for undergraduate students to apply in the accelerated masters' program.
  - invite collaboration between the UG, Grad and SIAT's Communications Committee required to <u>communicate and clarify guidelines and exemplars for success.</u>

  EXPECTED COMPLETION DATES:

  - Fall 2024 – Fall 2025

3. **Bridging Undergraduate and Graduate Programs Through Cross-Listed Courses**

- **Preamble: Cross-Listing Courses**
  As a part of the SIAT Undergraduate restructuring along with the inception of the SIAT Project-Based Masters we recognize the need and opportunities for designing and delivering several fourth year cross-listed courses between the Undergraduate and the Graduate programs, which will bring together the Undergraduate and Graduate students to create a greater awareness of the Graduate program and to strengthen bridges to research knowledge.

- **Action: Develop Cross-Listed Courses Between Undergraduate and Graduate Programs**

  EXPECTED COMPLETION DATES:

  - Fall 2024 - 2028

1.1.2 SIAT Graduate Program:

1. **Develop Clear Curricular Pathways to meet the needs of both Research and Project Based Masters**

- **Preamble | Project-Based Masters**
  In 2020, our project-based master's program was approved, and we began to accept applications to the program for Fall 2022. We have welcomed our first cohort in this inaugural year of 2022-23. This exciting new option for master's students is built on our curriculum emphasizing practice in research, practical experience, community engagement, and the application of knowledge in real-world situations. We aim to attract students with interest in practice-based industry-oriented skills and we also aim to reduce overall degree completion times. The SIAT External Review noted that "There is an important reframing that is necessary with regard to the proposition that research and industry are separate pathways for graduate students. Industry engages in Research & Development through their labs and Centres with outcomes in patents, papers and policies that rival academic institutions. Thus, the distinction that SIAT ought to be making is one between research for academic knowledge creation and research for industrial or community application and commercialization." The project-based masters can deepen the connections between industry and community alongside the research based graduate program and help to strengthen research within SIAT. Our External Review recommended that we "ensure that the school minimizes the development of a hierarchy between students enrolled in the project-based programs and those enrolled in academic research-based programs", thereby making room for an equitable strengthening of both programs through shared resources and appreciating SIAT's "*Strength in Diversity.*"

- **Actions: Support Masters' Students in Connecting with Industry**
  Pursue potential internships and industry partnerships that complement both the Project-Based and Research Masters' Programs to create bridges to industry.
  - In this inaugural year, we have been seeking mechanisms to link Project-based Masters' students with Industry and Community mentors, while acknowledging that this would also benefit Research Masters' students.
  - To date we have reviewed the potential for a Graduate Co-op program, the possibility of linking with **Touchpoint[1]** industry partners for opportunities for internships, collaborating with the FCAT Master of Digital Media program at Great Northern Way Campus (CDM) to explore interdisciplinary industry related projects, exploring Mitacs funding opportunities, and linking with other SFU entrepreneurial opportunities.
  - Consider ways of using the Project Based Masters as a revenue generator.

  EXPECTED COMPLETION DATES:
  - Curriculum Design for Pilot-Phase Opportunities for Internships and Industry | Community Projects: Spring 2024 - Fall 2024
  - Developing Diversity in Opportunities for Internships and Industry | Community Projects: Fall 2024 – Fall 2025-28

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[1] Touchpoint is an annual Symposium event for the SIAT Undergraduate Program that links UG students with Industry and most notably SIAT Alumni , offering them opportunities for internships and portfolio reviews. These internships are one of the markers for the successful bridge between our UG program and post-graduate careers.

2. **Develop Clear Curricular Pathways to meet the needs of both Research and Project Based Masters**

- **Preamble: Graduate Program – Rethink balance between Core Courses and Elective Offerings**
  We continue to develop and refine our research graduate courses. In 2017, our graduate caucus approved a substantial reorientation of our graduate curriculum through the creation of three new complementary "core" courses for master's and PhD cohorts, foregrounding interdisciplinary approaches to Science and Technology Studies, Foundations of Research Design and Methodologies, Computation in Design and interaction as a strong knowledge foundation in Interactive Arts and Technology. We are challenged to provide depth in coursework across multiple research domains and methodologies, balancing core course and elective content with deeper research engagement in the labs with supervisors, while also welcoming project-based masters students who require more elective courses.

  As a result of the External Reviewers recommendation to "reduce the overall number of courses required in the graduate program", we have been questioning how we can bring more flexibility to our "core" courses, while enabling the richness of graduate electives we have developed with the renewal of faculty members, and broader societal shifts necessitating the prioritization of equity and diversity across the curriculum, and rapidly changing technologies at the centre of research and practice in our program.

- **Action: Rethinking balance between SIAT "core courses" and elective offerings**

  - Pursue alternate approaches to SIAT "core courses" offerings by creating greater flexibility both "within" the course content and structure and "between" the core courses to support individual student disciplinary and interdisciplinary needs.
  - Revise Graduate Curriculum Electives to account for SIAT's diversity by providing deeper research engagement in disciplinary areas, acknowledging new faculty members disciplinary and critical-cultural diversity and sharing Elective Courses in an equitable way across research faculty members.

  EXPECTED COMPLETION DATES:

  - Alternate approaches to SIAT "Core Courses": Fall 2023 – Fall 2024
  - Revise SIAT Graduate Curricula Electives: Fall 2024 – Fall 2026

3. **Establish an Alumni + Industry Board to Support SIAT's Graduate Program and Research Alliances.**

- **Preamble:** One of the primary recommendations of the External Review was to "establish an industry board" to support the our graduate programs (with a particular focus on our project-based master's program). SIAT has a long history of engaging with our alumni creating a reputation of strong and trusted relationships over many years, both in ad hoc as well as formal relationships. In our self-study, we articulated the multiple community and industry relationships that SIAT engages in with our undergraduate and graduate programs and in our research. With the growth of our SIAT Alumni, we have seen many inspirational successes in our past undergraduate and graduate students, particularly in relation to the booming growth in the technology industry in the lower mainland, and further afield, in Silicon Valley including international successes of scholarly, artistic, design, academic and industry focused accomplishments. In addition to our own Alumni outreach, we have been working very closely with our FCAT support network including FCAT Alumni engagement and FCAT Advancement.

- **Action: Establishing and Alumni + Industry Board to Support SIAT's Graduate Program and Research Alliances.**

  - Working with the FCAT team, SIAT plans on creating an Alumni + Industry Board to support both the SIAT Project-Based and Research-Based Graduate Students linkages with Surrey and Vancouver Industry Partners (while also extending this to the undergraduate program outcomes).

  EXPECTED COMPLETION DATES:

  - Establishing a SIAT Alumni + Industry Board in Partnership with FCAT: Fall 2023 – Fall 2024
  - Work with the SIAT Alumni + industry Board to develop Curricular and Community Practices to further Alumni relationships with SIAT student and faculty, and to develop linkages with Advancement and SIAT Priorities Fall 2025 – Fall 2028

4. **Develop Equitable Ways to Financially Support Graduate Students in Supporting a Living Wage**

- **Preamble:** While SIAT graduate students secure a wide range of internal and external scholarships and fellowships, have access to FCAT and SIAT travel funds, regularly work with their supervisors and across the university as research assistants, and have regular opportunities to work as teaching assistants and sessional lecturers, funding remains a serious challenge for our domestic and international students, particularly in the last years of their PhD. Our survey has indicated that students would like more mentoring from their supervisors and from the SIAT graduate program particularly in applying for scholarships and fellowships and would like to have more practical opportunities such as paid internships or Co-op positions as a part of our program. Graduate students also seek greater transparency and guidance around application processes and deadlines.

- **Action: Continue to work with Graduate Students and the GSS to Establishing Establish and Support mechanisms to support a living wage**

  - Continue to collaborate with SIAT Graduate students and the GSS to support their strategies to pay a living wage.
  - Explore various mechanisms of BASS funding to support graduate students both through merit and through equitable sharing of funding resources.
  - Develop mentorship processes and clearer communications for grant and fellowship applications.
  - Support SIAT faculty members in strategies to improve student living-wages: examples include internal support for grant-writing to improve faculty funding support; considering supervisor-graduate student relationships and ratios; creation of SIAT alumni industry board which can connect faculty with industry partners for grants such as Mitacs.

  EXPECTED COMPLETION DATES:

  - Collaborate with SIAT Graduate students and the GSS (ongoing) now through – Fall 2024
  - Explore BASS funding to support graduate students in more equitable ways: Fall 2024 – Fall 2029
  - Explore alternative funding opportunities for graduate students within and outside of SFU: Fall 2024 – Fall 2029
  - Evaluate progress annually in the growth of Financial Support and share progress with SFU constituents: annually

1.1.3 PROGRAMMING RESOURCE IMPLICATIONS FOR Undergraduate and Graduate Programs:

- **Resource implications:** Graduate and Undergraduate Programs require Advising, Infrastructure and Communication resources to thrive, alongside the *Labour* of faculty, staff and students within the school that will be rejuvenating and revising our curriculum. One of our Governance linked issues regarding labour is to fairly and equitably consider how such a major curriculum renewal impacts faculty resources; and how we can consider workloads with these important factors in mind.

- **Resource Implications:** Graduate Student funding is a larger systemic problem and cannot be solved through a single Academic Unit; SIAT has been working with the GSS and continues to have conversations, listening to their requests/demands. Graduate funding in SIAT is directly tied to the value of grants that individual faculty members are awarded, and these resources have limited funding cycle timelines, are brittle resource containers; for example: one student's increase in funding often requires another student's decrease of funding. In order to create actionable support, Units need to work with Faculties, and Faculties need to work with the University as a whole, while the University most likely needs to lobby to Governments. Therefore, SIAT commits to supporting graduate student living wages, while acknowledging that we are embedded within larger systemic issues that impact graduate student living wages.

2. GOVERNANCE: EDI + FACULTY RENEWAL

2.1 Actions

- **1. Revise and Update SIAT Governance Documents**

  - **Preamble**
    The External Review highlighted SIAT Governance as one of its strengths stating that "the high autonomy in decision making at the multiple levels of the institution was consistently noted in conversations with faculty and staff. This autonomy has enabled people to feed confident that they can guide their own direction as a School, especially as the interdisciplinary praxis requires significant adaptability to be maintained." SIAT is committed to a governance revision that updates our current commitments, goals and values with an explicit and clear voice that aligns with FCAT's and SFU's Strategic Plan.

    Our current governance document was ratified by the school in May of 2007, five years after the birth of our school. We recognize the need for critical consultation and revision precipitated by the current shifting national and global priorities in education, research practice, ethics, and citizenship. The world has changed radically since 2007 and we acknowledge the critical imperative to change with it. SIAT also foresees that the revision of our governance *will impact our culture, our working environment, and will affect the goals and values of governance commitments* within our RTP document, our Teaching Policy document, and the Terms of Reference of our Standing Committees. These will need to reflect the spirit of our commitments.

    Our Self-Study focused on the theme of "Strength in Diversity: A Fulcrum for Change". SIAT needs to move beyond our strengths in disciplinary, intellectual and methodological diversity. We aim to create opportunities that foster inclusion, justice, equality, equity and well-being through the critical use of emerging technologies. We seek strategies and processes that position our readiness to commit to concrete and sustained action across pedagogy, research and governance in support of equity, diversity and inclusion.

    SFU's commitment to EDI, decolonization and indigenization has included the addition of a VP People, Equity & Inclusion Office. These commitments are being articulated through a set of goals and objectives for SFU in the form of an equity compass strategic framework: https://www.sfu.ca/vp-people-equity-inclusion/about-the-vppei/equity-compass/

- **Actions: Revisions to Governance, RTP and Teaching Policy Documents**
  As a key set of Governance Document Actions we are proposing to revise, design and implement updated governance documents that can support the renewal our SIAT goals, values and commitments in alignment with SFU's Strategic Plan and the greater cultural, social and ecological climate we live in. This will require a working group and consultation process across the school including not only our standing committees, but the voices of all of us, to revise our governance through a lens of equity and belonging.

  EXPECTED COMPLETION DATES:
  - Consult, Revise and Ratify the SIAT Governance document: Sept 2023 – Sept 2024
  - Consult, Revise and Ratify the SIAT RTP document: Sept 2023 – September 2024
  - Consult, Revise and Ratify the SIAT Teaching Workload Policy document: Sept 2023 – Sept 2024

2. Governance: Beginning Equity Conversations that Transform our Working Environment

- **Preamble:**
  AT SFU and in the greater Canadian and Global landscape, there is a growing need to take responsibility and make actionable commitments that operationalize the values of equity and belonging. SFU has made a commitment to EDI, decolonization and indigenization, as have our Canadian public funding agencies that SIAT interacts with such as the CCA, SSHRC, NSERC, CIHR, CFI and the CRC which integrate an equity lens by requiring clear goals, language and commitments to actions that support our research and our students. More and more we are required to consciously check our biases, our understanding of positionality, engage in cultural sensitivity training, and explicitly acknowledge our values, commitments and our responsibilities to our own governance as a school.

  SIAT wants to animate our governance through our work-environment and community-based actions. In focusing on our governance we are exploring how we are able to *Embed an Equity Lens in Governance, Policy and Leadership* within SIAT. To quote from SIAT's Anti-Racism statement: As Simon Fraser University commits to the challenging work of EDI, Reconciliation and Decolonization, our school too must look inward. We recognize that anti-racism work is an on-going process. We recognize the limitations of our language and categories. We recognize that symbolic gestures are not enough. We recognize that this work is important and necessary for the psychosocial-emotional well-being of the school. We recognize this work is ongoing.

- **Actions: Create a Space for Regular Conversations Within SIAT around EDI issues within our Academic Programs**
  SIAT wants to begin a program of regular conversations around anti-racism and decolonizing teaching and curriculum. This was a recommendation made by our External Review Chair, OCAD's Dean Dori Tundstall, when she visited our school in October 2022, and has also been discussed recently in SIAT's standing committees: the UCC, the GPC, the Communications Committee, the

Infrastructure Committee and SIAT's anti-racism working group. While this will be a work in progress it is critical that we engage our entire School in these issues in an ongoing basis.

EXPECTED COMPLETION DATES:
- Reach out to SFU's Centre for Educational Excellence regarding Inclusive Teaching and Anti-Racist Pedagogies: Summer 2023
- Develop a set of workshops | conversations for SIAT: Fall 2023 – Fall 2025
- Engage in workshops | conversations: Spring 2024 – Fall 2026
- Assess and iterate: Fall 2025 – Fall 2027

- **The Challenging Work of Inclusion in Hiring and Curriculum**

    Preamble: The External Reviewers stated that while "the anti-racism statement and the *Strength in Diversity* ethos expressed in the self-study are revolutionary in their boldness [and] articulate the hard work that the institution will need to undergo to give those words tangible form in the faculty complement, the curriculum, and the research for which the school is known … SIAT does not have enough open faculty lines to undertake the kinds of hiring practices (eg. Cluster Hires) that have been successful in other institutions across Canada. The External review provided an example with "the many years it took to successfully recruit SIAT's first Indigenous full-time faculty indicates the challenges the School faces".

    - **Actions: Begin Conversations about Future Faculty Hiring inclusive of EDI issues within our Academic Programs**
    Despite the lack of open faculty lines that currently exist in SIAT, in the next 5 – 10 years we are faced with a number of upcoming faculty retirements. SIAT needs to plan for the future of faculty renewal that includes our *Strength in Diversity*. These conversations need to follow on and be inclusive of point 2 above, *Create a Space for Regular Conversations Within SIAT around EDI issues within our Academic Programs.*
    EXPECTED COMPLETION DATES: Plan for next stage of SIAT Faculty Renewal based upon opening faculty lines due to retirements: Fall 2025 – Fall 2028

2.2. GOVERNANCE RESOURCE IMPLICATIONS:
- Governance revisions will be budget neutral; however, Faculty Renewal 's budget will require funding based upon the income generated by faculty retirements, requests for JELF allocations, Salary Lines and Start-Up funds; SIAT will also work with FCAT and SFU regarding possible Targeted Hires as appropriate

3. RESEARCH + INFRASTRUCTURE

3.1 **Actions**

Rethink, Revise and Update Infrastructure Terms of Reference

Preamble: Infrastructure Terms of Reference

Infrastructure is the connective tissue that underlines our resources, community capacity and connection between ourselves as researchers and educators and our connection between our students and community partners. Following on the opportunities that our governance revisions will bring, we aim to enhance our research and teaching infrastructure by also reconsidering the impacts on our evolving Infrastructure governance. We seek to renew our interdisciplinarity principles, exploring new research directions and prioritizes through our strategic faculty renewal. We recognize that our growth creates a critical need to rethink the governing and decision-making structures that guide fair and equitable Infrastructure use and research support.

- **Action: Create Updated Terms of Reference for Infrastructure + Research at SIAT, supported by consultation**
  - Create a Survey for gathering data on Research + Infrastructure Support Needs; Collect and Collate Data; and Review Research needs: **EXPECTED COMPLETION**: Fall 2023 – Spring 2024
  - Building upon SIAT's larger school-wide governance revisions: Explore, and Rewrite Infrastructure Committee Terms of Reference to better support SIAT Research and Teaching: **EXPECTED COMPLETION** Fall 2023 – Fall 2024

- **Action: Explore, Develop + Update Infrastructure Space Usage and Sharing Policies**
  - Space Usage and Space Sharing Policy: **EXPECTED COMPLETION**: September 2024 – September 2026

Revitalize and Develop Lab Support for SIAT Undergraduate Studios

Preamble: SIAT Undergraduate Studios

SIAT's Media Studio has had a recent major renovation during the last two years that has updated its equipment, software and relevant media capability in areas such as motion capture, virtual and alternate reality technologies and video, sound and storytelling infrastructure creating a state-of-the-art Media Studio, including video suites updates. We recognize that in order to take advantage of the Media Studio's enhanced technical and equipment infrastructure, we need to pedagogically support both student and faculty usage of this space. In discussion with the FCAT Dean we would like to explore the development of a Lab Support position to create relevant capacity and training oversight so that the Media Studio can be successful beyond its infrastructure. At the same time, other SIAT current studio spaces for undergraduate teaching are at maximum capacity. We recognize that adding additional new spaces may not be possible in the short term. Therefore, we aim to improve the effectiveness of the current spaces through 1) consulting with FCAT regarding opportunities for Advancement and 2) seeking alternative mechanisms for improving studio spaces such as co-design projects with students.

- **Action: Develop On-Going Lab Support for new SIAT Media Studio**
  - Explore, Develop and Consult on Lab Instructor Position; **EXPECTED COMPLETION:** Fall 2023 – Summer 2024
  - Create Lab Support position for SIAT Media Studio; **EXPECTED COMPLETION:** Spring 2024 – Fall 2024
  - Along with SIAT Curriculum revisions, explore updated curriculum and particularly experiential pedagogical models that more effectively utilizes SIAT Media Studio; **EXPECTED COMPLETION:** Spring 2024 – Spring 2027

Engage in SIAT Collaboration with SFU Library to Introduce and Create a Digital Textiles Makerspace

Preamble: SIAT Collaboration with SFU Surrey Fraser Library to Create a Digital Textiles Makerspace

SIAT has been supported by the current VPA Academic, the Dean of SFU Libraries and the Dean of FCAT to explore the expansion of SFU's maker space at the Surrey Library. The goal of this collaboration is to create, open, and operate a makerspace at SFU Surrey in Fraser Library "that is situated at the intersections of community inclusion" and "takes advantage of the critical making and design expertise of the SFU School of Interactive Arts & Technology." Additionally, we look forward to strengthening an already successful partnership between SFU Library and the School of Interactive Arts and Technology. SIAT faculty members and the Library's Media and Maker Commons will provide expertise in both the planning and operations of the makerspace.

- **Action: In Collaboration with the SFU Surrey Library: Design and Develop Digital Textile MakerSpace**
  - Preliminary Design Meetings: Summer - Fall 2023
  - Develop Resource Acquisition in Consultation with SIAT & SFU Surrey Fraser Library: Fall 2023 – Fall 2024
  - Installation, Spring 2024 – Fall 2024

3.2   INFRASTRUCTURE RESOURCE IMPLICATIONS:

- The Media Studio Lab Support position will be a new position and will have a budget impact which needs to be explored in relation to the current SIAT Technical Support Staff
- The SIAT Makerspace Collaboration with the SFU Fraser Library is budget neutral. With the support of the VPA, Wade Parkhouse, and the Dean, Carman Neustaedter, SIAT has contributed a portion of its 2022 carry-forward funds for the purchase of specialized equipment. The Surrey Library's budget line for the MakerSpace will include its Administrative Staff, consumables and repairs.
- Upgrading Labspaces for Research and Teaching will require budgets for renovation and renewal which are currently being supported by new Faculty member JELFS, but may also be supported through FCAT Advancement, with the caveat that there are no additional FCAT funds for the school. SIAT is reviewing its budget for potential upgrading capacity. SIAT plans to review its budgetary capacity in four years regarding infrastructure improvements.

4. COMMUNICATION AND EXTERNAL PROFILE

4.1   Actions

The external review committee has acknowledged SIAT's outstanding performance in fostering **interdisciplinary research**: "the School has exceptional outcomes in nurturing interdisciplinary research". However, SIAT needs to match its Communication Marketing and Branding strategy with SIAT's performance. The External Review stated that "the message of interdisciplinarity is not effectively communicated through SIAT's channels (social media, website)", as they tend to focus on individual student or faculty profiles. SIAT needs to develop a better branding strategy that clearly articulates interdisciplinarity to its multiple stakeholders. External Reviewers also recommended that "communication strategies to highlight the advantages and limitations of interdisciplinarity and specialization" that clearly indicating opportunities created by this balance and that, for students, incorporate the knowledge gained through their own pathways through the programs including their own portfolios and experiences. While this recommendation is also being articulated through greater flexibility in program changes, it also requires clear communication strategies by SIAT.

- **Implement more Effective Communication Strategies to Highlight SIAT's Interdisciplinarity as well as Specialization.**
- **Implement Communication Strategies that Celebrate SIAT's Changes to Curriculum, Programs, Governance, and Infrastructure**

The SIAT Communication and External Profile Actions will primarily be focussed on SIAT <u>actions that have emerged</u> in sections above and will express these through n*arratives* that enliven and communicate: 1. The Revisions and Outcomes of our Undergraduate and Graduate Programming, 2. Communicating our Governance and its Goals and Values that emerge through integrating an equity lens, 3. The shifting Narratives of Infrastructure + Research, and 4. our Communities, Partners, and our *"Strength Through Diversity."*

- **Action: Share Stories Narratives that showcase outcomes of the unique incorporation of practice-based outcomes**
- **Action: Develop Industry Alumni Board and Communicate its Influences and Activities**
- **Action: Communicate our Goals, Values and Narratives that emerge from our newly emerging Governance**
- **Action: Share the Outcomes of our approach to Infrastructure and its work with community, students and research**

EXPECTED COMPLETION DATES:

- Ongoing: Fall 2023 – Fall 2030

4.2 ICOMMUNICATION AND EXTERNAL PROFILE RESOURCE IMPLICATIONS:

- ▪ **Resource implications:** These Actions will be completed by the current SIAT Communications Associate with support from the Communications Committee and in collaboration with SIAT standing Committees: the Undergraduate Curriculum Committee, the Graduate Program Committee, the Infrastructure Committee and the SIAT anti-racism working group.

5. ADMINISTRATION

5.1 Action/s:

The external review committee has acknowledged SIAT's highly competent administrative staff, highlighting that although the administrative staff is small, there is a high degree of competence in running the school, while acknowledging that there is risk and a need for additional studio technicians for labs (see Infrastructure, Section 3.2. Undergraduate Studios). SIAT recognizes the strength of our staff, but we are also in the process of losing our SIAT Manager of over 20 years to retirement. One of our Key Actions in the next year is the need for stabilizing our staff complement including the integration of staff hires due to retirement, the addition of a new Graduate Advisor position, and filling the gaps that the adjustment of these staff positions create.

1. **Hiring SIAT Office Staff to Replace Positions Becoming Vacant**

- • **ACTIONS: Office Staff Hires (SIAT Manager; Graduate Advisor; Director's Assistant; Research Manager)**
- • **EXPECTED COMPLETION DATES:** Spring 2023 – Fall 2023

5.2 ADMINISTRATION RESOURCE IMPLICATIONS:

- • **Resource implications:** SIAT has received approval for the new graduate advisor position which will replace our previous graduate assistant position; all other office positions are ongoing positions within SIAT and do not require additional budget and therefore these hires are budget neutral.

The above action plan has been considered by the Unit under review and has been discussed and agreed to by the Dean.

Unit Leader (signed)	Date
[signature] Dr. Thecla Schiphorst. Professor, Director, SIAT **Name** ………………………………………… **Title**…………………………………………….	April 26th 2023 …………………………………………………………………….

Section 2 - Dean's comments and endorsement of the Action Plan:

I applaud the school on a detailed and very thorough action plan. The school is embracing the opportunity for change as a result of the external review and I highly commend them for being ready and willing to take on the work.

The school plans to restructure their undergraduate curriculum and has already taking many actions to update their concentrations to better meet student and industry needs. I find this body of work to be strong and I applaud the collaborative and collegial process that the school is utilizing. Efforts to better connect the undergraduate and graduate programs should be equally fruitful.

The upcoming work on the graduate program curriculum shows promise. I highly value the school's consideration of increasing enrolment in the newly created Project-Based Master's program as a source of revenue generation. This is particularly important in the current time of budget tightening. The FCAT Dean's Office will explore increases in SIAT's budget if graduate student enrolments increase.

Graduate student funding continues to be a challenge both within the school and across SFU. The school has good ideas around how to address this with an emphasis on increased research grant funding, which the school is already highly successful at. It will be important for faculty members to 'get on board' with such endeavours. The FCAT Dean's Office will continue to provide support on grant writing to faculty members.

The school plans to update governance documents across the next year. I think this is very timely and reflects the changing nature of the faculty complement within SIAT as new faculty members come on as part of the faculty renewal process. This will allow SIAT to grow and adapt. The FCAT Dean's Office is available to support these efforts.

I find SIAT's work on equity, community, and care, and anti-racism to be exceptional. The ongoing workshops and conversations planned as a school look strong. I highly appreciate SIAT's desire to incorporate EDI and decolonization within their governance work.

SIAT has embarked on a collaboration with the SFU Surrey Fraser Library to create a digital textiles maker space. This will be the first major expansion of making facilities at Surrey campus since its origin. This will enhance the student experience and I anticipate it will allow SIAT to increase undergraduate enrolments in particular focal areas.

The FCAT Dean's Office will continue to work with the school on its communications and marketing work, and prioritize advancement efforts on infrastructure, student support, and research excellence.

Faculty Dean	Date
Carman Neustaedter, Dean of FCAT	**Sept 19, 2023**
[signature] ………………………………………………………………	………………………………………………………………………..

Educational Goals Assessment Plan Template

Unit/Program: School Of Interactive Arts and Technology

Contact name: Susan Clements-Vivian

Date:

This template is designed to help units implement assessment of Educational Goals after receiving feedback from their External Review. Units are not expected to assess every Educational Goal every year. *(Textboxes will expand as you type)*

1) **Who were the members of your Educational Goals Assessment team?** Outline who has worked on the assessment.

> Susan Clements-Vivian and Thecla Schiphorst have taken a lead role in developing this document in consultation with Elizabeth Elle in her role as Associate Vice-President, Learning and Teaching. Educational Goals are managed in SIAT through the Undergraduate Curriculum Committee, the members are Marek Hatala (interim chair) Chris Shaw, Nilay Yalcin, Russell Taylor, Susan Clements-Vivian, Naomi Loo, Thecla Schiphorst and Chantal Gibson.

2) **Are your program's Educational Goals current, or do any of them need to be revised?**

In some cases, Educational Goals may need to be revised to keep apace with changes in the discipline or in the program's course offerings, or to ensure they continue to align with a unit's mission and values. Feedback from the External Review may inform revision of Educational Goals.

> SIAT developed four general and five SIAT-specific Educational Goals in 2017. They are Critical Thinking, Written and Oral Indicators, Teamwork, Ethics and Professionalism, Technological Literacy, Design Proficiency, Media Proficiency, Programming Proficiency and Practices of Making. The most successful outcome of this process was the evaluation of Written and Oral Communication which went through a robust multi-course assessment. This process led to adding a required writing-intensive (W-designed) course in the second year. A deficit of writing and reading skills within our undergraduate study body had been identified as needing improvement and had broad support from our faculty. The assessment of other Educational Goals could have been more useful as the process needed to be aligned with curricular questions that SIAT had identified through other data-driven processes. SIAT is currently in a state of faculty and program renewal, and the previously identified Goals from 2017 are outdated.

3) **Is your program's curriculum map up to date?**

A curriculum map may need to be updated to reflect any major changes to the program's course offerings (i.e. new or substantially revised courses, courses that have been removed).

The offerings of courses within SIAT have been fairly stable for the last several years, however, we are in a period of both structural and course updates to the undergraduate curriculum as well as the addition of a new project-based Master at the graduate level. SIAT's curriculum map will need to be updated to reflect these changes.

4) **Assessment Plan**

Susan Clements-Vivian is on the Senate Committee for University Teaching and Learning, which is responsible for the Educational Goals program at SFU. The shape of this document has been influenced by discussion within this committee on the role and format of Education Goals. In consultation with Elizabeth Elle in her role as Associate Vice-President, Learning and Teaching, SIAT has renewed our commitment to Educational Goals by defining a useful, agile, and action-oriented process that helps SIAT understand and address curricular questions through a data-driven approach.

SIAT strictly adheres to an Educational Goals process that doesn't create extra work or meaningfully contribute to improvements within the school. As SIAT is in a period of both faculty and program renewal, our previously defined program-level Educational Goals (2017) do not reflect the current state of the program or our future goals. However, SIAT learnt valuable lessons through developing a set of Educational Goals and working through a round of assessments. In particular, more focused granular questions are more valuable than assessing a broader set of Goals.

The Educational Goals process will be a valuable part of how SIAT asks questions and collects data on emergent curricular issues. SIAT will use multiple data points to assess, understand and shape our curriculum. In addition, as an interdisciplinary program that addresses and responds to the shifting values and cultural, social and technological changes in society, SIAT will use this process to ask emergent and pressing questions that help integrate new faculty within our curriculum, remove content and courses that no longer support our program goals and to identify areas of weakness or omission.

To this end, SIAT isn't defining a set of Educational Goals at this time but using the Educational Goals process to address emergent questions to understand better and improve our program. This process will be managed by SIAT's Undergraduate Curriculum committee and embedded in our curricular redesign process.

5) **How do you plan on sharing your findings within your unit?**

Faculty groups that are involved in creating new courses and program Concentrations will be responsible for collecting data on the validity of the program changes proposed and for the successful implementation of these changes. Data will be shared with the school through school meetings.

West Mall Centre 1363
8888 University Drive
Burnaby B.C. Canada V5A 1S6

TEL + 1 778 782 5433
avplt@sfu.ca
SFU.CA/vpacademic/learnteach

**OFFICE OF THE
VICE-PROVOST, LEARNING & TEACHING**

MEMORANDUM

ATTENTION:	Thecla Shiphorst, Director, School of Interactive Arts and Technology
FROM:	Elizabeth Elle, Vice-Provost, Learning & Teaching (for SCUTL)
RE:	SIAT Educational Goals Action Plan
DATE:	August 23, 2023

The Vice-Provost, Learning and Teaching and the Senate Committee for University Teaching and Learning has recently been charged with providing feedback to units regarding their assessment of educational goals.

As part of your preparation for your recent external review, you reviewed your educational goals, and reflected on previous assessments. Your work to understand the communication skills of your students, with assessments in multiple courses, followed by the addition of a required second year writing intensive course, is a great example of how the Educational Goals process can be leveraged to support the development of your curriculum, and the learning of your students. Thank you for engaging with this important work!

SIAT is now undergoing a period of faculty and program renewal. I greatly appreciate your acknowledgement that the Educational Goals you set in 2017 are outdated, and the need to include new faculty in conversations about refreshing them for all of your concentrations. I also agree that it's wise to more clearly define what you'd like to learn from the EG process, and applaud your intention to re-imagine your curriculum in the context of the skills and attributes you want your graduates to achieve.

As you re-imagine your curriculum, there may be opportunities for the staff in the Centre for Educational Excellence to support your conversations, as they have expertise in curriculum development and renewal. Once you are at the curriculum mapping stage, the staff in the Learning Experiences Assessment and Planning group have expertise; they can also assist you with designing a more fully developed assessment plan for EGs that can help you meet your aspirations for your curriculum without becoming a burden on your faculty. As you do so, I encourage you to take advantage of the resources available on SFU's dedicated educational goals website.