



FLEMING

Annual Report

2021-2022





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List of Governors

MISSION

To empower our students with the innovative education, research and real-world experiences they need to build better lives, better communities and a better world.

VISION

Creating prosperity and transforming communities through education and innovation.

VALUES

We will achieve our vision and mission by adhering to our values, which are:

- Responsiveness,
- Innovation,
- Collaboration,
- Inclusiveness, and
- Accountability



A Message from the Chair



On behalf of the Board of Governors of Sir Sandford Fleming College, it is my pleasure to present our 2021-22 Annual Report. The Board is grateful to President Maureen Adamson, Fleming's Senior Management Team and Fleming employees for their continued commitment and dedication to student success and the communities they serve.

Fleming's Board of Governors have continued to meet virtually and are slowly reintroducing in-person meetings, a welcomed change by all. We have watched the College continue its important work towards the goals outlined in the Strategic Plan and look to the next year with enthusiasm as the College continues to grow and strengthen.

It is my pleasure to serve as Board Chair. As a Fleming graduate myself, this is a role I hold

with responsibility and pride. We look forward to another year of success and growth at Fleming College

A handwritten signature in cursive script that reads "Fred Clifford".

Fred Clifford, Chair
Board of Governors of Sir Sandford Fleming College

A Message from the President



With the continued support of Board Chair Fred Clifford and the Board of Governors of Fleming College, I am pleased to submit this year's Annual Report on the 2021-22 progress made toward achieving the goals outlined in our Strategic Plan.

In this 2021-22 Annual Report, you will read about how we established a Fleming Jobs Council, invested in our people, and developed frameworks that support employee engagement and enablement. You will also read how we established a student experience strategy to ensure outstanding experience for students throughout their entire journey, from recruitment through to graduation with us.

As President of Fleming College, it is of utmost importance that Fleming be seen as a true partner in our community, the go-to institution

for quality and future-oriented education. We are very pleased to continue that commitment and announce the official opening of a new educational facility, the Cobourg Learning Centre, which will attract students and train more workers in the heart of Northumberland County.

We have come a great distance, working with our community partners and industry experts to ensure we meet the goals set out by our Strategic Plan. As I reflect on the progress we have collectively made, I am reaffirming my commitment to achieving our goals so that we can provide the most innovative student experience.

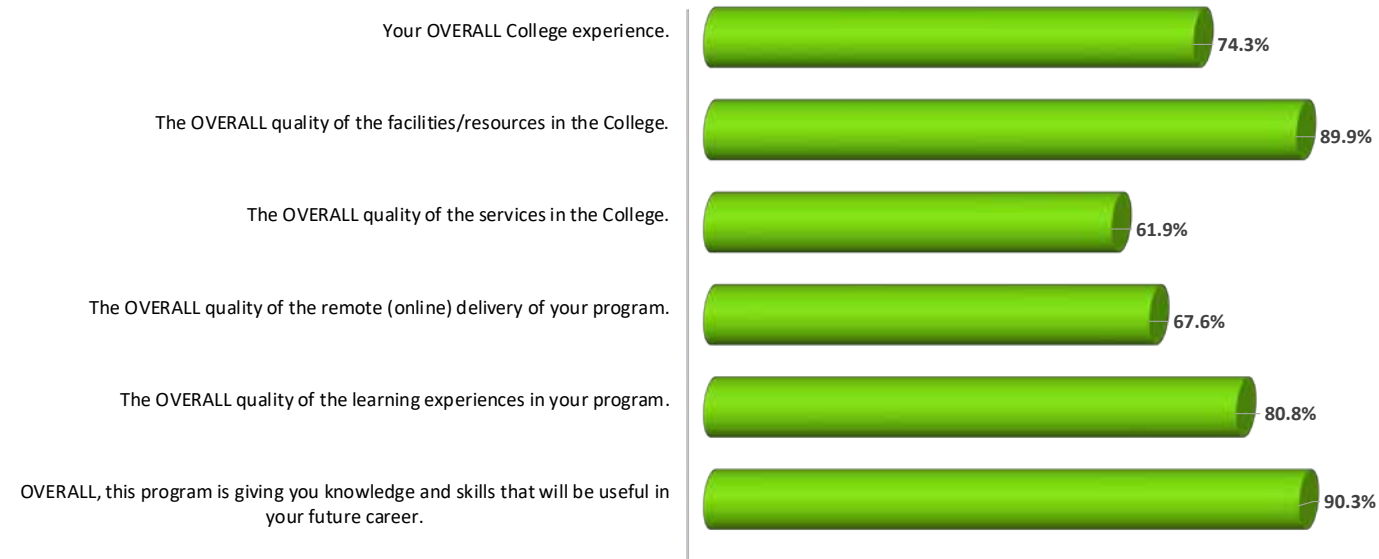
Finally, I would like to take a moment to acknowledge all the hard work and dedication of our Board, my Senior Management Team, our faculty and staff, and the entire community that we serve. Thank you for supporting student success, and thank you for supporting Fleming College.

A handwritten signature in cursive script that reads "Maureen Adamson".

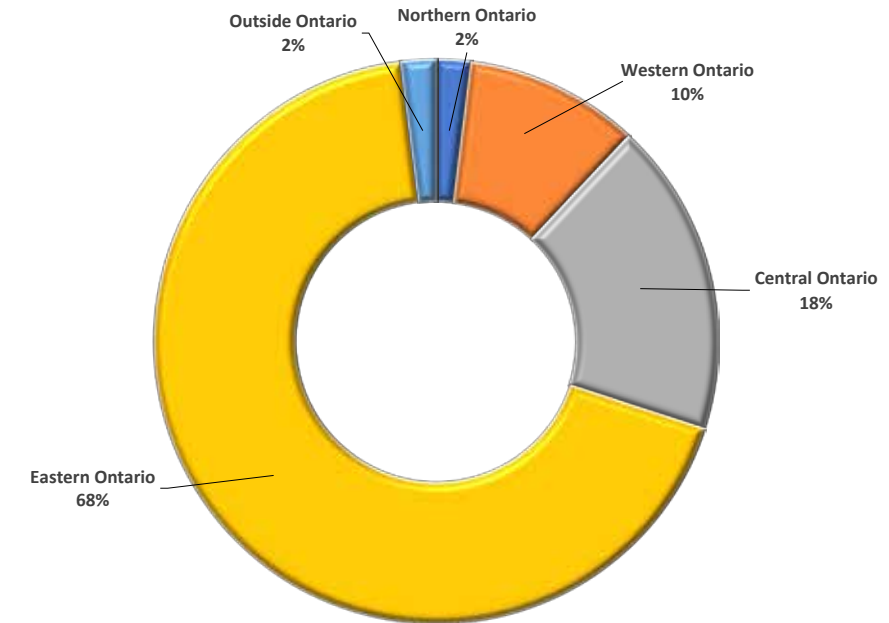
Maureen Adamson,
President

Student Information

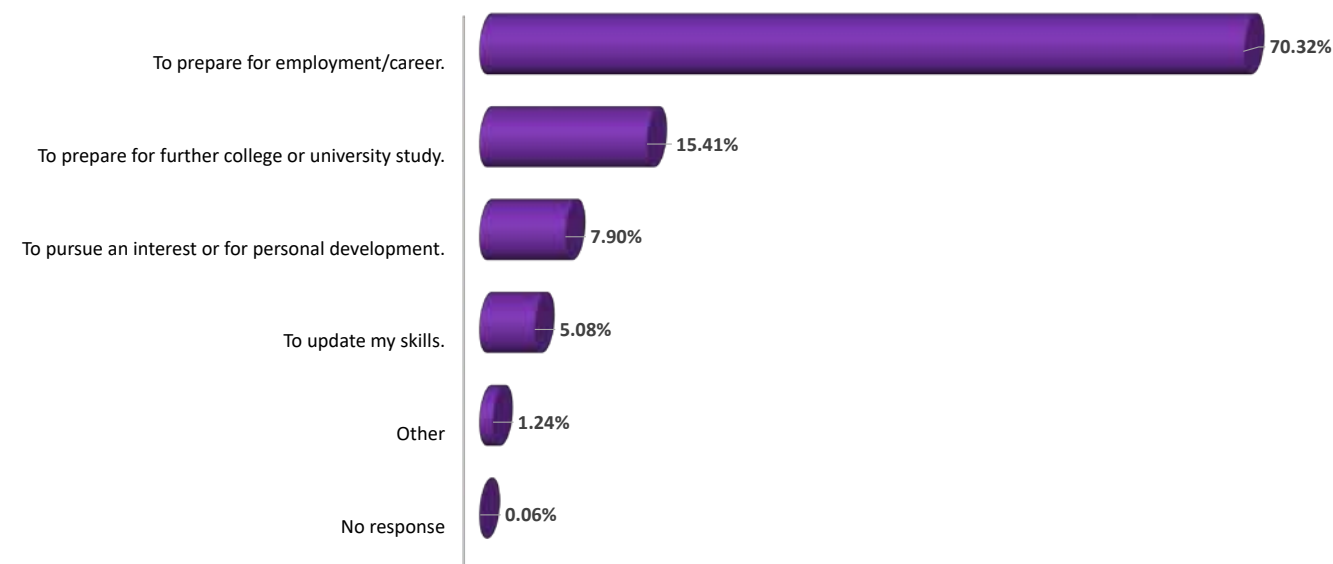
Student Satisfaction Rates



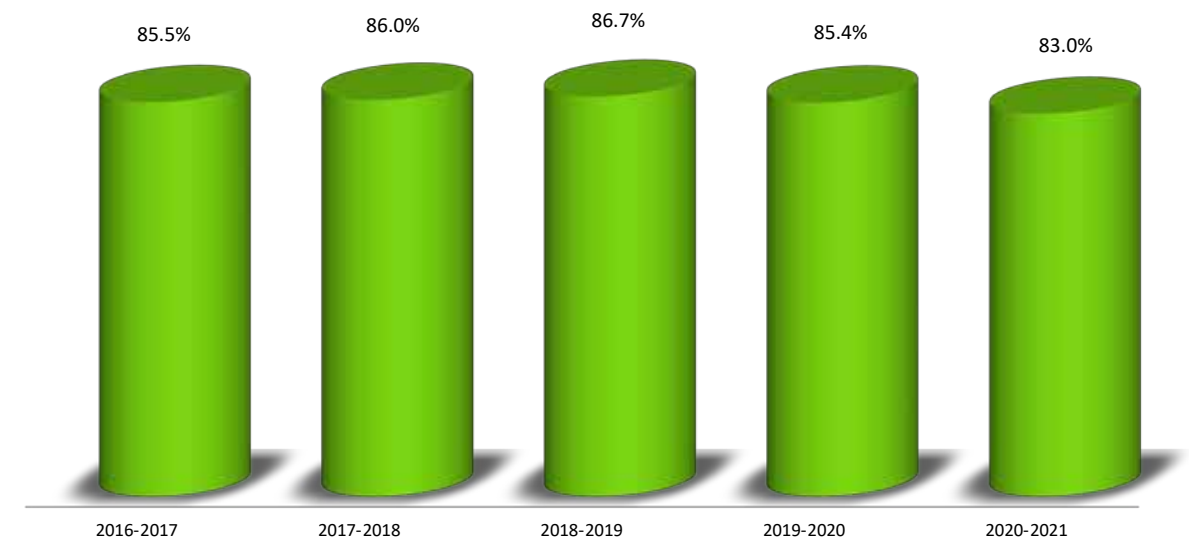
Where Do Fleming Students Come From?



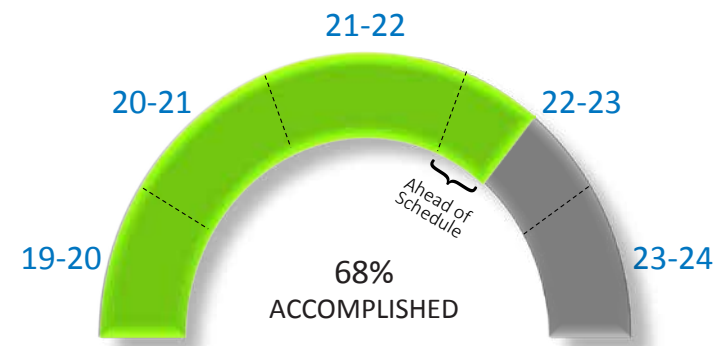
Student Education Goals



Student Retention (in Fleming College)

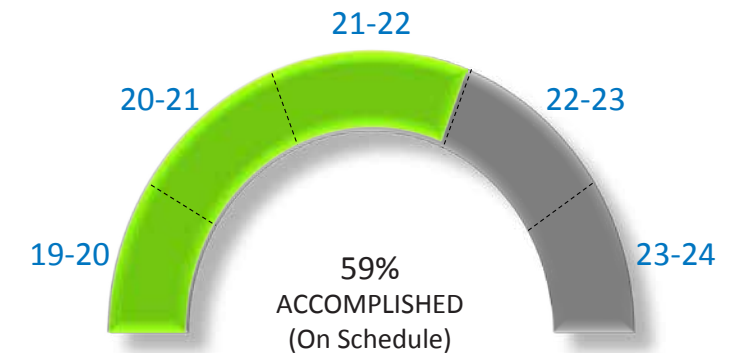


Strategic Plan Progress



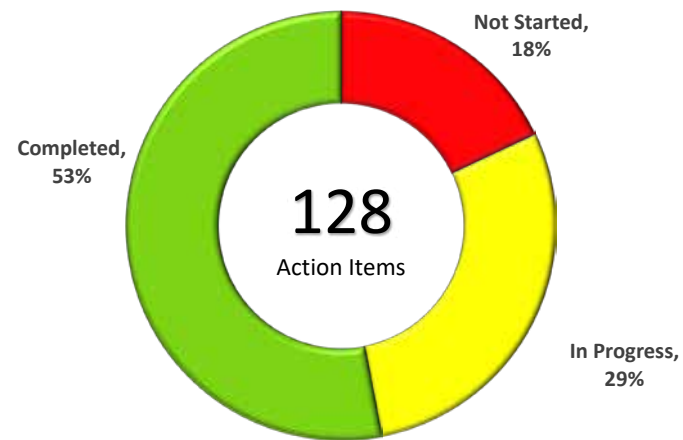
Progress on the 2019-2024 **Strategic Plan**

Academic Plan Progress

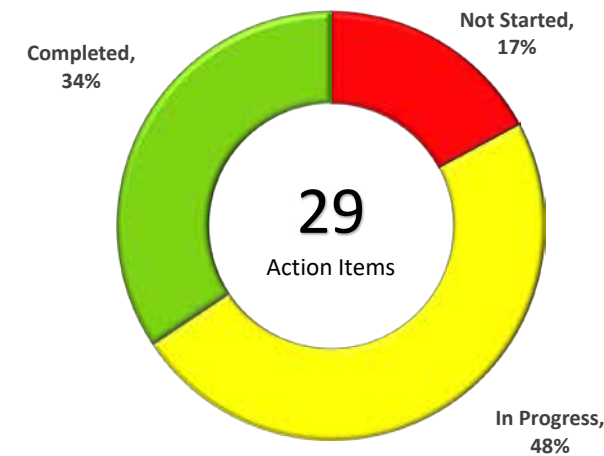


Progress on the 2019-2024 **Academic Plan**

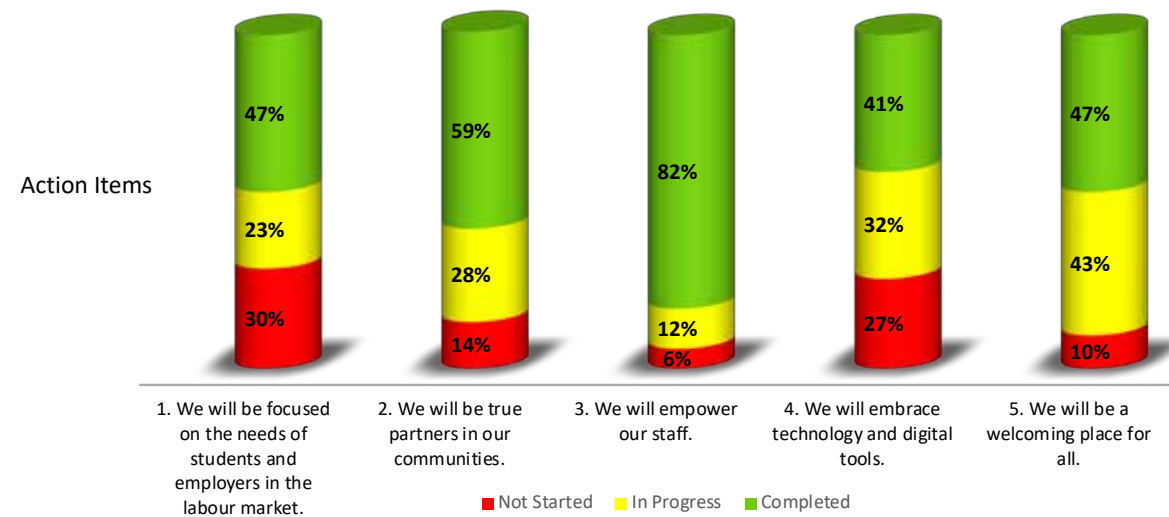
Completion Rate of the 2019-2024 **Strategic Plan**



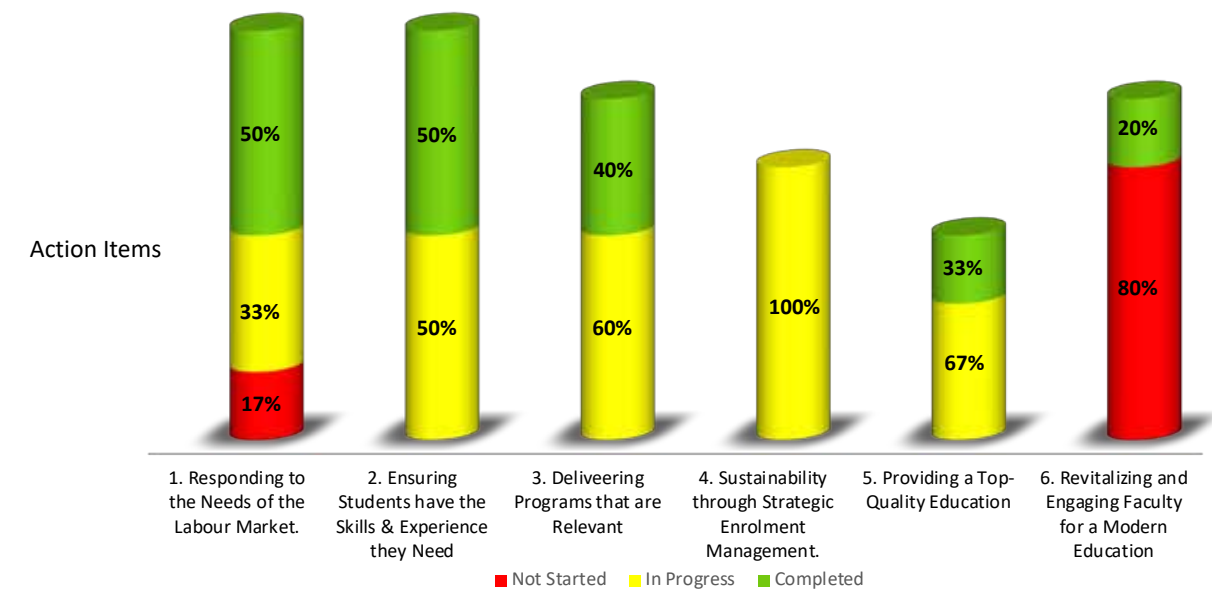
Completion Rate of the 2019-2024 **Academic Plan**



Completion Rate on **Strategic** Commitments

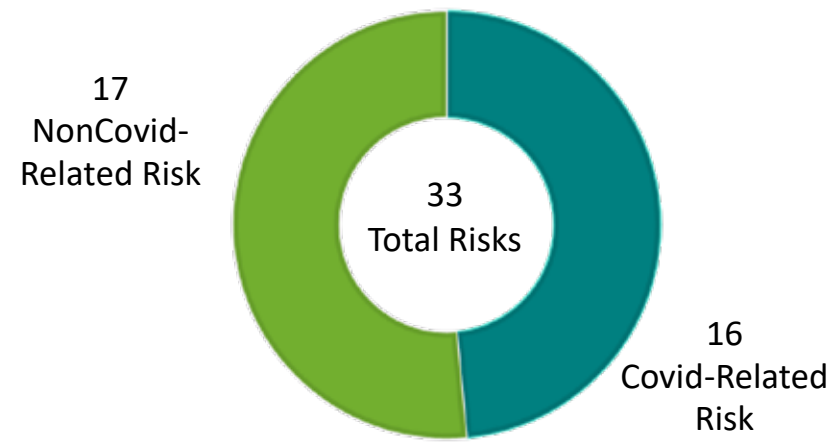


Completion Rate on **Academic** Priorities

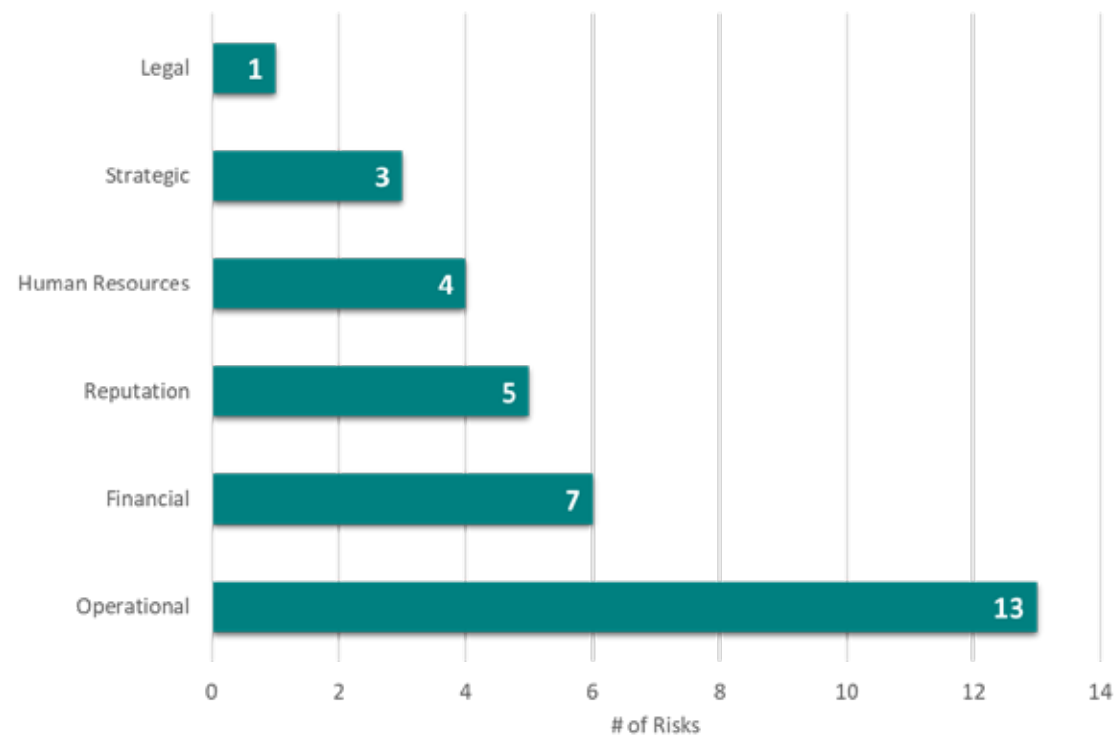


Enterprise Risk Management Report

Enterprise Risk Management – November 2021 Report



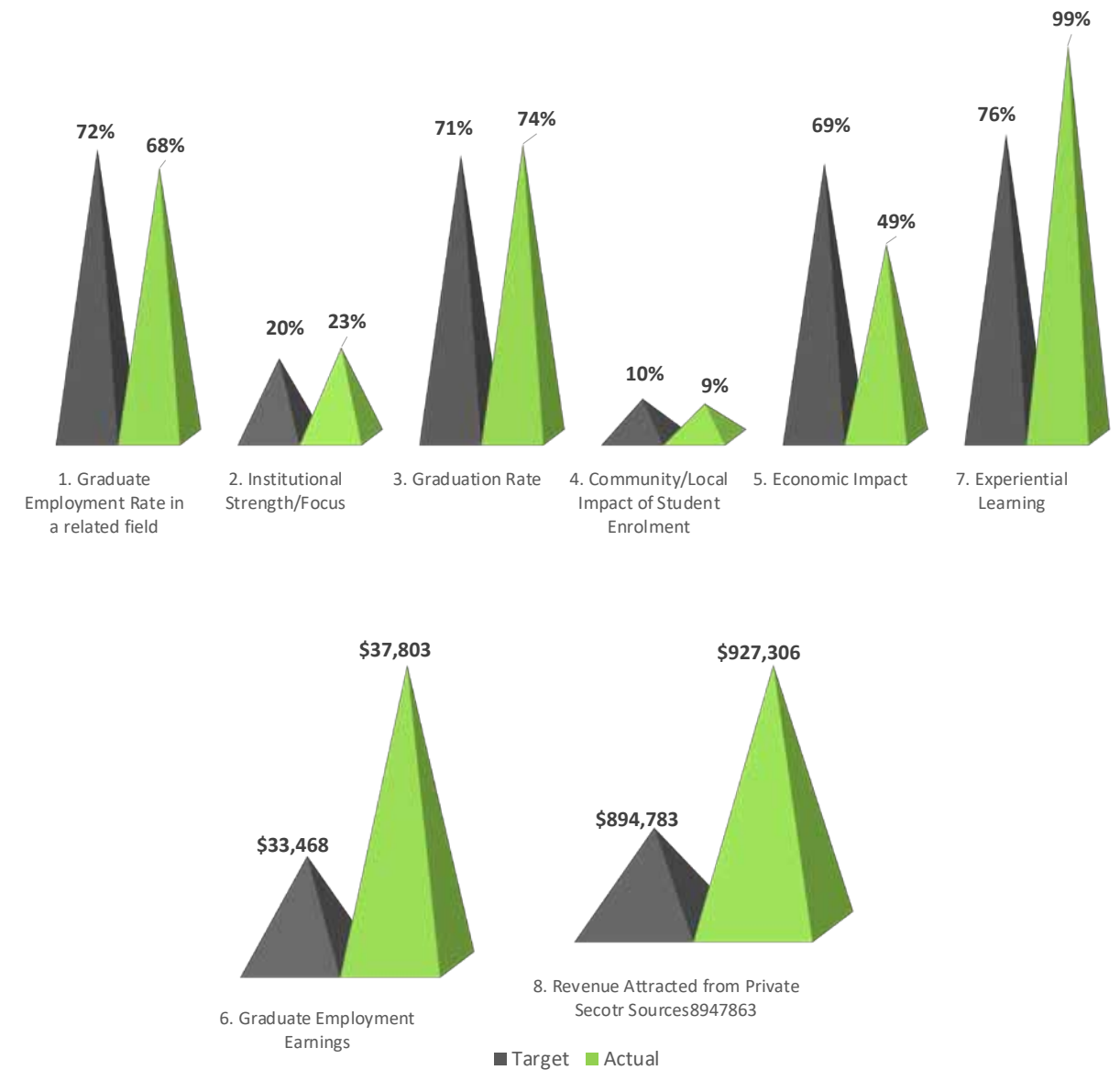
Risk Category Breakdown



33 risks were identified, and analyzed to determine the likelihood that the risk will occur and the impact it will have on the organization if it does occur. The risk analysis results in a risk score between 1 and 25. Of the 33 risks in the Risk Register the median risk score was 9. The Board of Governors has adopted a risk appetite of 15. This appetite level, allows the college to pursue opportunities that will benefit the college while managing the risks associated with those opportunities. **Six risks exceeded the risk appetite and were reviewed by the Board of Governors.**

SMA3 Performance Metrics Evaluation Report

2021-2022 SMA3 Performance Metrics Evaluation Report Summary

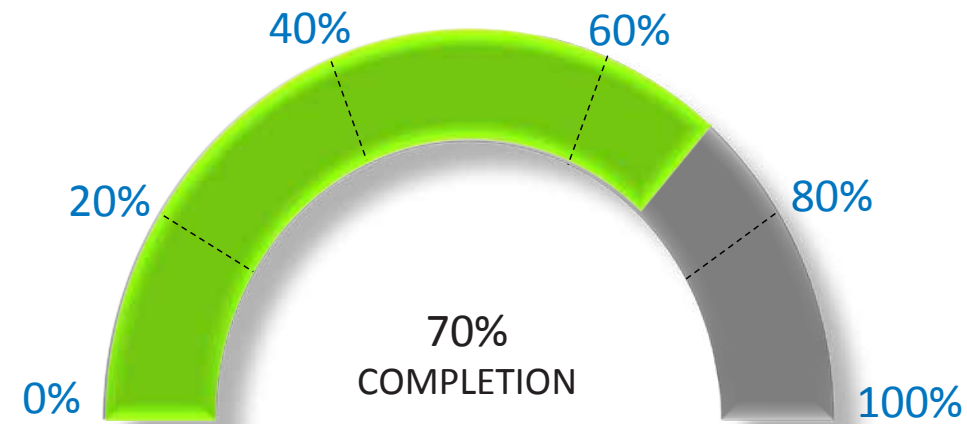


As with all public provincial colleges, Fleming College entered into a 2020-2025 Strategic Mandate Agreement (SMA3) with the Ontario Government. 2021-22 was the second year of the agreement and eight of the ten metrics were activated using 2020-2021 data for evaluation. Fleming exceeded five out of the eight metric targets.

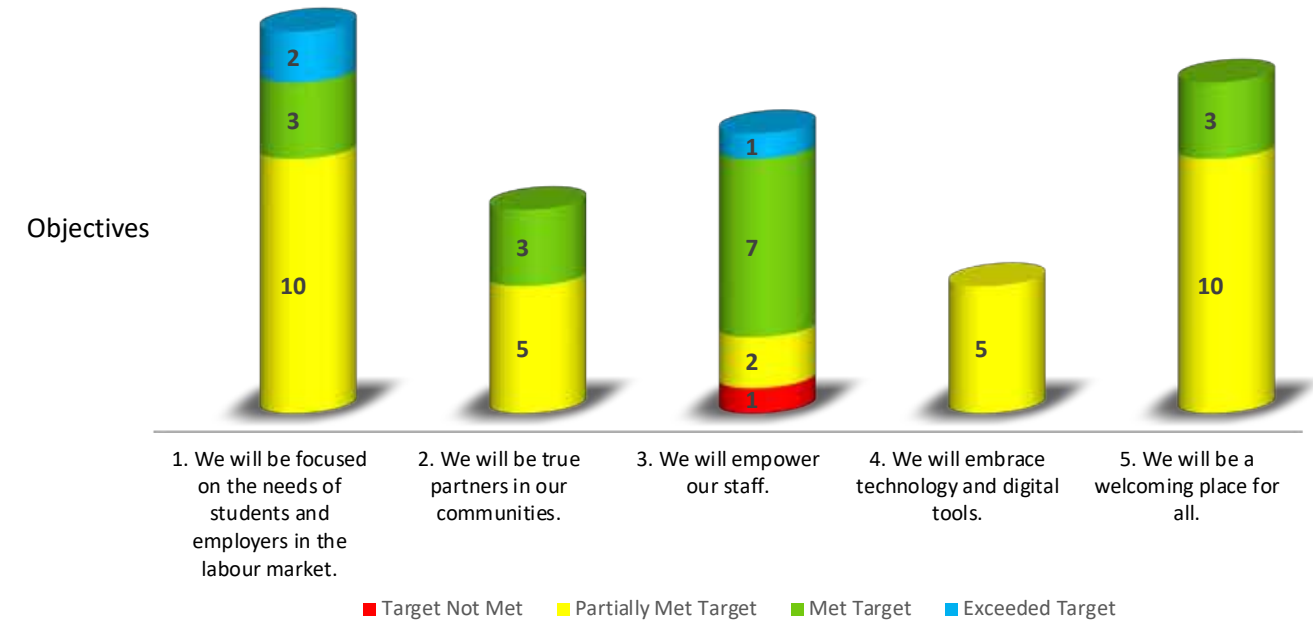
The COVID-19 pandemic played a significant role in Fleming not achieving three performance metrics

Business Plan Review

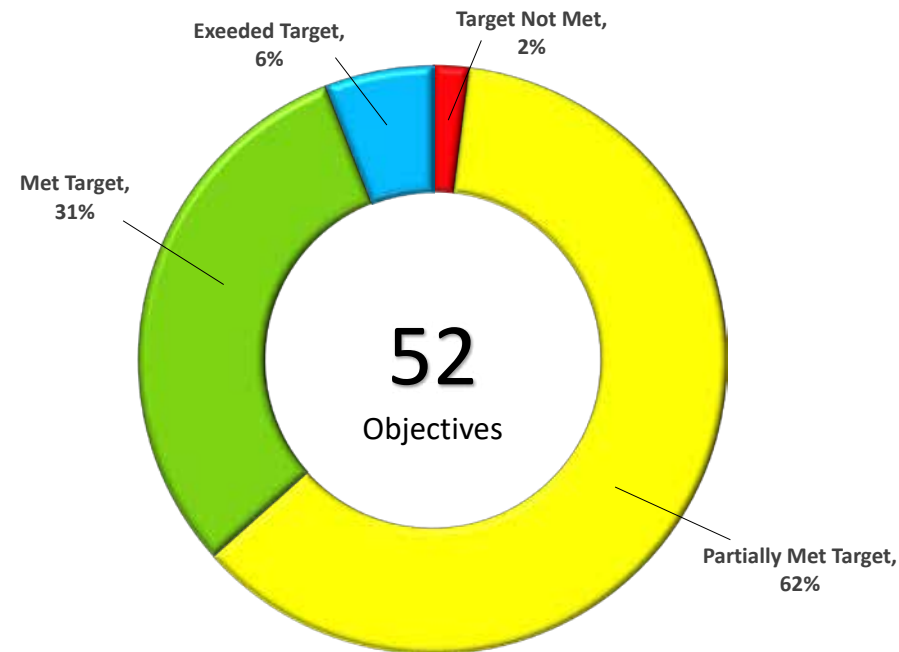
21-22 Business Plan Evaluation



Evaluation of 21-22 Business Plan Objectives By Commitment



Performance Evaluation of 21-22 Business Plan Objectives



2021-2022 Report on Business Plan Objectives

21-22 Objectives

Achievement of Objectives

1. We will be focused on the needs of students and employers in the labour market.

1.1 Establish a Fleming Jobs Council that will include external program advisors who can share current job market trends, develop labour market data and provide a regular feedback loop between Fleming, employers and students. This will ensure Fleming graduates are sought after and that programming evolves as the job market changes. Industry has a voice and we intend to listen.

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|--------------|--|-------------------------|
| 1.1.1 | Establish a Fleming Jobs Council that integrates with the SSM Jobs Council to collect labour market data from the regions we serve. The Jobs Council will revitalize our Program Advisory Committees (PACs) - integrate with 1.1.5, 1.2.2 & 4.2.1. | Partially
Met Target |
| 1.1.2 | Implement the Strategic Enrolment Management long-term plan to enhancing student recruitment, conversion, retention, timetabling and the student experience | Partially
Met Target |
| 1.1.3 | Engage with major employers, Jobs Council and new PACs that result in a Fleming summit to include research, business and technology showcase; working towards optimizing our Employer/Graduate satisfaction rate - integrate with 2.2.3. | Met Target |
| 1.1.4 | Understand the Job Market for Indigenous communities to increase participation of Indigenous Peoples in the workforce. | Exceeded
Target |
| 1.1.5 | Reinvigorate new Workforce Program Advisory Committees (WPACs) to be more interactive with students and faculty and to better understand how industries and employer expectations are evolving - integrate with 1.1.1. | Partially
Met Target |
| 1.1.6 | Create a Culture of Innovation, Entrepreneurship & Intrapreneurship that encourages students to be innovative employees and/or consider business start-up options upon graduation. | Partially
Met Target |

1.2 Establish a new Student-Employers Partnerships Network that will increase the availability of hands-on experience through co-ops, internships, placements, apprenticeships and other types of experiential learning that are so essential to ensuring our graduates are job ready, or ready to create their own jobs.

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|--------------|---|-------------------------|
| 1.2.1 | Create a Student-Employers Partnerships Network to boost student experiential learning opportunities. | Partially
Met Target |
|--------------|---|-------------------------|

21-22 Objectives

Achievement of Objectives

- | | | |
|--------------|---|------------|
| 1.2.2 | Restructure and expand Employment Services System; bring together Career and Employment Services, research and external expertise through the new Jobs Council to expand student experiential learning, blend data, and increase employment rates - integrate with 1.1.1. Realignment of Career Services. | Met Target |
|--------------|---|------------|

1.3 Create an Advanced Skills Training Program modeled after those in Europe and the example of other global leaders in this area that will see students divide their time between the classroom and apprenticeship-style training in the workplace. This will better prepare students for jobs, while at the same time creating a ready-made workforce for employers.

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|--------------|--|-------------------------|
| 1.3.1 | Prepare students for jobs through Advanced Skills Training. Pilot project roll out and testing completed in the 21-22 academic year. | Partially
Met Target |
| 1.3.2 | Exceed proportional growth in programs strength/focus as identified in SMA3 metric target. | Exceeded
Target |

1.4 Develop a Student Success Strategy that will increase retention and graduation rates as well as employment by working together to develop individual success plans to help people identify and meet their goals at all stages of their life. The strategy will touch high school students, first-time post-secondary students, those returning to college or work after a gap, graduates looking for their first jobs and those looking for the kind of life-long learning that will allow them to progress in and change careers.

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|--------------|--|-------------------------|
| 1.4.1 | Student Success Coaches in place to assist struggling students and increase the likelihood of student success. | Met Target |
| 1.4.2 | Applying data analytics research through the BIRS Department to amass a better understanding of student need and inform a student success strategy, including: 1) why students withdraw early or fail to find employment upon graduation; 2) developing a review of qualitative data to gain insights from the Early Leaver' survey, applying predictive analytics to improve retention. | Partially
Met Target |
| 1.4.3 | Define and shape Continuing Education priorities to better serve the needs of Fleming graduates and those seeking upskilling and lifelong learning. Develop a plan for implementing first phase, delivery methods, focusing on offerings aligned with the future labour market. | Partially
Met Target |
| 1.4.4 | Develop new ways to receive a quality education with strategies for micro-credentialing, flexible delivery and Contract Training leading to certificates, diplomas and graduate certificates. | Partially
Met Target |
| 1.4.5 | Establish targets for incremental student retention and graduation with projected increases each year – integrate with SMA3 graduation rate metric targets. Further tracking graduates success through alumni on LinkedIn among other tools. | Partially
Met Target |

21-22 Objectives	Achievement of Objective
2. We will be true partners in our communities.	
2.1. Be the go-to institution for quality and future-oriented education for our community, Ontario and beyond. We will seek out opportunities to partner with industry and governments at all levels to develop new programs that support the economy, and provide lifelong learning as employees and entrepreneurs adapt to the evolving workplace.	
2.1.1 Increase the number of partnerships with industry where Fleming is the sole supplier, and in partnerships with other PSE institutions. Review the data on conversion of employees for employers who partner with Fleming.	Met Target
2.2 Diversify our streams of funding so that we will remain a sustainable public institution on which our students and communities rely, both as an employer and a contributor to our local economies, even as governments grapple with ways to tackle their deficits and the greater competition for the school-age population.	
2.2.1 Create an integrated fundraising plan and an amended alumni outreach strategy to meet emerging capital, program and student support projects with implementation in Q3 of fiscal year.	Partially Met Target
2.2.2 Amend and implement and Internationalization plan to drive post-COVID recovery (enrolment plans, source markets, student support and international partnerships); including potential overseas contract training and research opportunities.	Partially Met Target
2.3 Create an Applied Research Development Strategy to expand research activities into all Fleming programs so that we are stretching and contributing to innovation in Canada across all fields, while also finding solutions to issues with which our own municipalities and regions are grappling.	
2.3.1 Create an Applied Research strategy, linked to the Academic Plan, completed and approved by SMT by Dec. 2021.	Met Target
2.3.2 Continue to establish school-specific applied research program plans for each school with mature plans developed for each school by the end of the 21-22 academic year. Plans will include measurable research activity targets specific to that school. Research programs will include a mix of applied research activities that best suit the school, such as curriculum integration, capstone projects, applied projects, community-based research or externally-funded research. These efforts will include expanding student involvement in Applied Research.	Met Target
2.3.3 Celebrate and promote the hard work of students, faculty and staff involved in applied research and their contributions to innovative work and solving important issues in the community. Develop an applied research showcase, include research items in appropriate college and school events, and develop a media strategy to showcase research at Fleming - integrate with 1.1.3.	Met Target

21-22 Objectives	Achievement of Objective
2.3.4 Improve tools and resources for faculty and staff looking to carry out applied research, ensuring the information is relevant and useful. Create a Fleming Researcher Guide; update and improve the Office of Applied Research & Innovation department website to include new resources; and begin to provide professional development opportunities for faculty and staff interested in research.	Partially Met Target
2.3.5 Finish launching the NSERC/CFI funded Centers for Innovation in Aquaculture Production (CIAP) and Industrial Innovation of Things (CAMIIT). This will include key positions being hired and facility building and renovation completed.	Partially Met Target
2.4 Enhance pathways for students between Fleming College and Trent University and other post-secondary institutions so that students, regardless of where they start their post-secondary education, can receive the customized education they need to thrive and adapt in the workplace.	
2.4.1 Enhance transfers from Trent to Fleming with a goal of increasing the number of students transferring in both directions (college to university and university to college).	Partially Met Target
21-22 Objectives	Achievement of Objective
3. We will empower our staff.	
3.1 Support an Employee-Management Engagement Strategy to work toward a positive and energized workplace culture that respects and values the opinions and ideas of all employees. This will provide the tools required and remove obstacles so that together we can provide the best education, leadership and research practices needed to fulfil our mission.	
3.1.1 Evaluate 2 or more measures of employee engagement and implement a 90-day improvement plan for each.	Met Target
3.2 Be recognized for the first time as one of Canada's top employers because of our new focus on a shared culture of quality, respect, transparency, accountability, collaboration, accessibility and inclusion.	
3.2.1 Application completed for the 2022 Top 100 Employers program.	Met Target
3.2.2 An Equity, Diversity, and Inclusion framework in place and underway.	Met Target

21-22 Objectives		Achievement of Objective
3.3 Invest in our people by creating an Employee Success Strategy that will identify and provide dedicated professional development opportunities, high skills training and the equipment and technology needed to provide the best possible experience for students and staff.		
3.3.1	Create and implement an employee learning and development framework.	Met Target
3.3.2	Develop an inventory of equipment and technology currently in use for corporate operations and develop budget priorities for upgrades. Where necessary consult with employers and external advisors on best practices used in the workplace.	Partially Met Target
3.3.3	Develop and implement an effective Administrative performance management process and form(s) incorporating learning and development needs and career planning discussions.	Met Target
3.3.4	In collaboration with Communications, develop and implement an internal communication framework to support employee engagement and enablement.	Exceeded Target
3.3.5	Develop and publish guides, job aids, and frequently asked questions documents to employer leaders and employees with relevant, easily accessible information and guidance.	Met Target
3.3.6	Empower our faculty by providing continuous learning opportunities and access to the latest teaching and learning techniques through Common Block Professional Development.	Target Not Met
3.3.7	Complete workplan milestones for Corporate Improvement Plans based on key areas identified from third-party reviews. Key component includes further digitization of financial processes including expense reporting.	Partially Met Target
3.3.8	Conduct process mapping of select procurement processes to further leverage technologies and identify efficiencies while ensuring compliance with BPS Procurement Directives.	Met Target

21-22 Objectives		Achievement of Objective
4. We will embrace technology and digital tools.		
4.1 Create a Tech Development Centre to conduct an inventory of the technology and digital tools that currently exist at Fleming, and consult with industry to guide the expansion of technology for faculty and students so that both are using the most appropriate technology to meet the expectations of modern workplaces.		
4.1.1	Conduct a technology inventory across all Fleming Campuses and conduct higher education technology industry research.	Partially Met Target

21-22 Objectives		Achievement of Objective
4.1.2	Identify gaps in support of a new Tech Development Plan. Survey students, faculty and staff regarding their use of current technology; what is working well, and what needs improvement. Forecast five-year technology budget requirements for the plan.	Partially Met Target
4.1.3	Expand digital learning and complete a Digital Transformation Plan to ensure more students locally and in remote and rural areas including indigenous communities, or those who prefer to learn online and on their own schedule have access to quality education through a renewed approach to digital learning.	Partially Met Target
4.1.4	Advance the integration of modern learning technologies into all learning environments and experiences, whether in-person, online or through a hybrid delivery model, leveraging the Technology Development Centre.	Partially Met Target
4.2 Use the latest data-driven technology to create a Job Market Analytics program to improve our use of data and analytics to better understand the job market and outcomes for graduates so that program development will be informed by research.		
4.2.1	Through the Jobs Council launch a new method of inviting program suggestions from the public - integrate with 1.1.1.	Partially Met Target

21-22 Objectives		Achievement of Objective
5. We will be a welcoming place for all.		
5.1 Establish a Student Experience Strategy to ensure an outstanding experience and success for students upon graduation. We will improve career and support services, renew our facilities and a focus on student life and well-being on campus and in our communities.		
5.1.1	Student Experience division further reorganized to group similar goals and activities. Measures of success would include efficiencies and streamlined services with improved and measurable outcomes for students.	Met Target
5.1.2	External expertise in facilities use to improve and enhance College space for students, including C-Wing revitalization and a new residence in Haliburton; development plan in place and funding sources identified.	Met Target

21-22 Objectives	Achievement of Objective
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5.2 Strengthen our relationship with Indigenous Peoples by helping to create opportunities in post-secondary education, and actively participating in the process of reconciliation by ensuring all students and staff gain a deeper understanding and appreciation of Indigenous Peoples, their ways of knowing and histories.

- 5.2.1** By Year 5 (2024-2025), Graduate Certificates to have at a minimum incorporated an introductory level of Indigenous culture training, course or measurable competency for all students. Partially Met Target
- 5.2.2** 1,300 students to be enrolled in Indigenous Perspectives designated qualifying courses. Twelve programs to have the designation, and an additional 12 will be added by Year 3 (2021-2022) Partially Met Target
- 5.2.3** Increase self-identified Indigenous students from to more than 500 and 700 by year 2024-2025. Partially Met Target
- 5.2.4** Increase the number of academic partnerships in Indigenous knowledge. Partially Met Target
- 5.2.5** Establish relationships with community partners seeking to hire: 1) Indigenous students and 2) non-indigenous students with the Indigenous Perspectives Designation. Partially Met Target
- 5.2.6** Deliver dual credit programs on First Nations. Partially Met Target
- 5.2.7** Monitor and implement best practices from other institutions to ensure appropriate implementation of TRC recommendations, with consideration also of other Commissions' work such as RCAP or UNDRIP or other international best practice such as NAISA or WIPCE. Partially Met Target

5.3 While growing our domestic enrolment, create an Internationalization Strategy that includes expanded spaces for international students, creates study abroad opportunities for domestic students, attracts talented faculty from overseas and builds on supports to create an environment where students from other nations can succeed and feel welcomed. Domestic and international students gain valuable knowledge by learning from each other's culture and political, social and economic perspectives.

- 5.3.1** Implement strategies to increase enrolment as the college-age demographic of domestic students continues to decline by attracting student from diverse groups, regions and international countries. The College will seek to welcome all students by creating programs and supports relevant to students in our region, elsewhere in Canada, Indigenous learners and students overseas. Partially Met Target

21-22 Objectives	Achievement of Objective
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5.4 Ensure we are meeting the needs of diverse populations among our staff and students in culturally safe and inclusive ways, and providing an accessible campus and accessible learning services supports for under-represented groups and for those experiencing mental health challenges.

- 5.4.1** Address accessibility services and academic supports for students through Accessibility Plan, collaboration with the academic division, and enhanced support services that will include consideration of sexual violence, EDI, Indigenous students and International students. Partially Met Target
- 5.4.2** Build on a culture of engagement with Students to ensure they are supported through interaction with staff to support teaching and learning and foster close relationships and mentoring through applied research, development of soft skills, and job-seeking preparation. Partially Met Target
- 5.4.3** Online Sexual Violence Prevention training modules developed by McGill will be customized for Fleming; videos on consent will be developed and be mandatory for all students during the 2021-2022 academic year. Met Target



Becoming a Welcoming Place for All: Advancing Equity, Diversity, and Inclusion

Fleming is deeply committed to having an equitable, diverse, and inclusive College community. Supported by the Equity, Diversity, and Inclusion Council, Fleming launched an inaugural equity, diversity, and inclusion survey. The survey was crafted to better understand perspectives and to gain insight into the gaps and barriers that different groups and communities may experience across the College. The findings from the survey indicated three primary goals, including:

- Increase the diversity of students and employees
- Reduce experiences of discrimination
- Increase positive response rates to equity and inclusion statements

In early 2022, an Equity, Diversity, and Inclusion Action Plan was presented to the Board of Governors. The Action Plan provides a way forward and includes measurable actions and practices that will support the College in accomplishing and advancing equity-related goals. The Action Plan covers three key domains, including:

Employee - To advance equity, diversity, and inclusion across human resource practices and sustain equity, diversity, and inclusion commitments through leadership

Student - To integrate equitable and inclusive perspectives within curriculum and to ensure the student community finds themselves reflected within learning spaces and practices

Community - To engage a broader campus community of learners, leaders, and community members to build and cultivate a culture of respect, inclusion, and belonging

This Action Plan will support us in advancing commitments under the Accessibility for Ontarians with Disabilities Act, including proposed post-secondary education accessibility standards, the Indigenous Education Protocol, and the Scarborough Charter. This work requires continual learning, growth, and development, and Fleming recognizes and acknowledges that students and employees who have, for several years, engaged in equity, diversity, and inclusion work across the College community.



School of Environmental and Natural Resource Sciences

In 2021-2022, Fleming's School of Environmental and Natural Resource Sciences (SENRS) received Skills Development Fund (SDF) and Skills Advance Ontario (SAO) funding from the Ontario Ministry of Labour, Training and Skills Development to address provincial labour market and local community needs in the Forestry and Agriculture sector. Both sectors have a significant economic impact in the region and provincially and training opportunities are required to support a healthy talent pipeline.

Towards a Diverse and Inclusive Workforce:

The forestry and agricultural sector are currently very insular and do not take advantage of "non-traditional" sources of labour, namely women, youth, Indigenous people, and immigrants. In addition, low educational attainment and skill levels present a significant challenge.

The training addresses the following:

- The lack of skilled labourers in the agricultural and forestry sectors
- Need for competency-based assessment on equipment operation and targeted equipment operating training for incumbents, including the use of GPS systems
- Basic skills training for job seekers and upskilling opportunities for incumbents
- Increase of underrepresented groups in each sector

The projects included the procurement of state-of-the-art simulators for training on various types of heavy equipment for the Agriculture, Forestry, Construction and Drilling sectors. Types of machinery include Articulated Dump Truck, Backhoe Loader, Dozer, Drill Rig, Excavator, Grader, Forestry For-warder and a Forestry Harvester.

Simulators are an efficient tool to practice skills on various equipment and provides the trainer with individual results for skills assessment. Modern simulators accurately capture the behavior of machines using actual engineering properties. This realism is central to effective training, as simulators serve as the perfect bridge between classroom theory and equipment on the worksite.

In addition, the use of simulators for training is based on the following benefits:

- Increased training effectiveness as participants can learn in a controlled environment how to safely operate machines without placing equipment and personnel at risk and participants start live-operations at a higher competency level. Likewise, seasoned operators improve their capabilities with simulation-based upgrading.

- Simulators can be deployed as both a training tool and an operator benchmarking tool by using the simulator's objective performance metrics to calculate competency scores.
- People with manageable disabilities that could function in the industry but choose not to pursue it due to lack of confidence, will be more comfortable operating equipment after simulation-based learning.
- Using simulators for training reduced the initial intimidation and allows participants to build confidence, encouraging underrepresented groups to pursue a career involving equipment operation.

In addition to simulator-based training, skills training was developed in collaboration with industry partners. The developed training is unique from what someone would typically be able to access from Employment Ontario offices and has a clear connection to the industry and includes both soft and hard skills training. The 1st intake of the SAO Forestry program kicked off on January 31, 2022. Each SAO intake is 4 weeks in length, and additional intakes are scheduled for the following months.

The training addresses additional skill gaps determined in consultation with industry partners and includes workshops in Forestry skills, health and safety training, equipment operations, essential workplace skills and career preparation. As of March 31st, SENRS has offered 2 SAO intakes with a total of 22 participants successfully completing the program and 16 job seekers have participated in experiential learning on simulators.

To-date, incumbent worker training included various Forestry workshops and the Professional Chain-saw Operator course. Further incumbent training for upskilling, reskilling and competency assessments will be provided during the next months through workshops and simulator-based training.



CAMIIT Takes Flight

While all the industry partner-led applied research projects undertaken at Fleming College's Centre for Advancement in Mechatronics and Industrial Internet of Things (CAMIIT) are exciting, a new project flies high above the others – literally.

CAMIIT is working with local aerospace engineering company Horizon Aircraft, and with researchers from Ontario Tech University's Machining Research Laboratory, to assist in the design and testing of innovative aircraft parts. The Natural Sciences and Engineering Research Council of Canada (NSERC) Innovation Link program awarded the research teams \$750,000 in early 2022 for the three-year long project.

Based in Lindsay, Ontario, Horizon Aircraft isn't interested in manufacturing a typical airplane, instead they are putting their aerospace engineering expertise into building an innovative hybrid electric aircraft. Their novel 5-passenger aircraft, named the Cavorite X5, is designed for short runways or urban landings using electric power for vertical take-off and landing. This type of aircraft is commonly known as eVTOL (electric Vertical Take-Off and Landing). Unlike most eVTOL that often resemble a large drone or multicopter, each wing of the Cavorite X5 airplane will slide open to uncover a patent-pending ducted fan system inside the wings to achieve vertical take-off and landing.

The eVTOL industry is growing rapidly thanks to its promising reduction of carbon emissions and the recent advances in batteries, control systems, and advanced manufacturing technologies. Industry leaders have begun to use these new manufacturing technologies to make certain aircraft parts because they can create lightweight structures able to withstand high vibrations, stresses, and large loads. Lighter structures and overall weight reduction reduce manufacturing costs, aircraft fuel consumption, and subsequent carbon dioxide emissions. This is where Fleming College's CAMIIT comes in – CAMIIT's research team, led by Dr. Fereydoon Diba, P.Eng., are experts in the field of advanced manufacturing technologies. With CAMIIT's help, Horizon Aircraft will take the Cavorite X5 from the proof of concept stage towards deployment and commercialization.

This is the second project undertaken by CAMIIT, Horizon Aircraft, and Ontario Tech University's Machining Research Laboratory (MRL). The trio first began working together in 2020 with a smaller project (funded through NSERC's Engage grants program) that saw the completion of the design and creation of certain parts and mechanisms for the Cavorite X5 using additive manufacturing and topology optimization. The research teams and Horizon Aircraft were happy with the successful, synergistic collaboration and the complementary knowledge, expertise, and research facilities of CAMIIT and MRL. The teams are looking forward to again joining forces on this much larger project and the eventual flight of the Canadian-made Cavorite X5.



SkillsAdvance Ontario

SkillsAdvance Ontario (SAO) is a pilot initiative by the Ministry of Labour, Training, and Skills Development to support workforce development and upskilling in identified key growth sectors such as Aviation, Health Services, Forestry, Construction and Agriculture

This Employment Ontario project is funded in part by the Government of Canada and the Government of Ontario.

The programs are aimed to provide free and specialized training for job seekers and incumbents. Fleming College has played a significant role in delivering SkillsAdvance Ontario programs by positively impacting the community through various training initiatives.

Programs include:

SAO Altitude. A program specifically designed with industry partners in the Aviation sector.

SAO Healthcare programs work with hospitals, long-term care facilities and community health agencies to provide both training and upskilling in a variety of programs such as Personal Support Worker, Perioperative Nursing, Palliative Care for Healthcare Workers, Pharmacy Assistant, Food Service Worker, and Management for Nurses.

SAO Forestry provides job seekers with training in Forestry skills, health and safety, equipment operations, essential workplace skills and career preparation to address provincial labour market and local community needs in the Forestry sector.

SAO Construction programs target job seekers to provide introductory construction skills to address labour shortages and training needs with a long-term vision to enhance the resiliency and competitiveness for the construction industry.

SAO Agriculture, partnered with City of Kawartha Lakes with SAO AdvancEd for Agriculture.

The SAO programs are offered in partnership with the Eastern Ontario College Consortium (EOCC) which is a coalition of five Eastern Ontario colleges – Fleming, St. Lawrence, Algonquin, Loyalist and La Cite colleges.

All SAO's function to support workforce development by providing an opportunity for workers and aspiring workers in identified sectors to learn new skills, enhance capabilities resulting in job development and retention for employers. Programs also strongly support partnerships with employers, trade associations, training providers and employment service providers in the community.

Key Project Goals

- Provide sector specific training with emerging trends/technologies in collaboration with employers.
- Transition job seekers to employment through industry relevant trainings and dedicated job support.
- Promote job seeker recruitment by connecting skilled workers with employers, community agencies and service providers.
- Support job retention of the workforce by engaging incumbent workers in upskilling and/or enhancement training.

SAO Achievements/ Community Impact



SAO Highlights	
Incumbent Trainings	<ul style="list-style-type: none"> • Partnered with 8 Training partners within the community • Delivered more than 55 different types of technical training across all sectors • Collaborated with employers to meet sector needs and workforce requirements • Advisory Committees formed with employers in Eastern Ontario region
Training Model	<ul style="list-style-type: none"> • Dedicated labs, equipment and facilities designed for experiential hands-on learning • Industry experts/ post-secondary faculty used to deliver high quality trainings • Virtual sessions / Hybrid model used for flexible learning opportunities • Participant support provided to eliminate barriers to complete training successfully
Employers/ Community Feedback	<ul style="list-style-type: none"> • Aligned with industry needs, training provides required skills for entry level jobs with key growth sectors • Great feedback received from employers/service providers for training curriculum • Partnership with local training providers creating positive wide impact within the community • Strengthened connections between qualified job seekers and employment service providers
Job Seeker Training	<ul style="list-style-type: none"> • Essential employability skills training provided across all programs • 100% job assistance and development provided for all job seekers • Quarterly follow ups with job seekers and incumbents on training delivered • Continued one to one support to remove barriers and increase job opportunities
Job Development/ Retention	<ul style="list-style-type: none"> • Customized approach for each sector with employability, technical, and health & safety trainings • Established connections with local trade associations to increase hiring opportunities • Trade Certifications provided with all SAO's well appreciated by employers, job seekers and incumbent workers • Ongoing support

2021-2022 Board of Governors

The Fleming College Board of Governors acts as the governing body of the College. The Board is composed of twelve external volunteer members (which includes four external members appointed by the Lieutenant Governor) and five internal members: the President; one academic staff member; one administrative staff member; one support staff member; and one student.

Fred Clifford

Board Chair; Chair-Executive Committee
(Cobourg)

Paul Downs

Board Vice-Chair; and Chair, Governance Committee
(Mississauga)

Don Gillespie

Chair, Finance and Audit Committee
(Lakefield)

Cynthia Chan Reynolds

Governor (Lieutenant Governor in Council Appointed)
(Peterborough)

Ben Currelly

Governor (Lieutenant Governor in Council Appointed)
(Port Hope)

Sudha Datta

Governor
(Toronto)

Kerri Davies

Governor
(Ennismore)

Karen Jensen

Governor
(Fenelon Falls)

Jason Fleming

Governor (Lieutenant Governor in Council Appointed)
(Toronto/Peterborough)

Tim Kennaley

Governor (Lieutenant Governor in Council Appointed)
(Peterborough)

Michael Nasello

Governor
(Peterborough)

Lisa Reed

Governor
(Port Hope)

Laura Coles

Support Staff Governor

Thomas Luloff

Academic Governor

Pam Stoneham

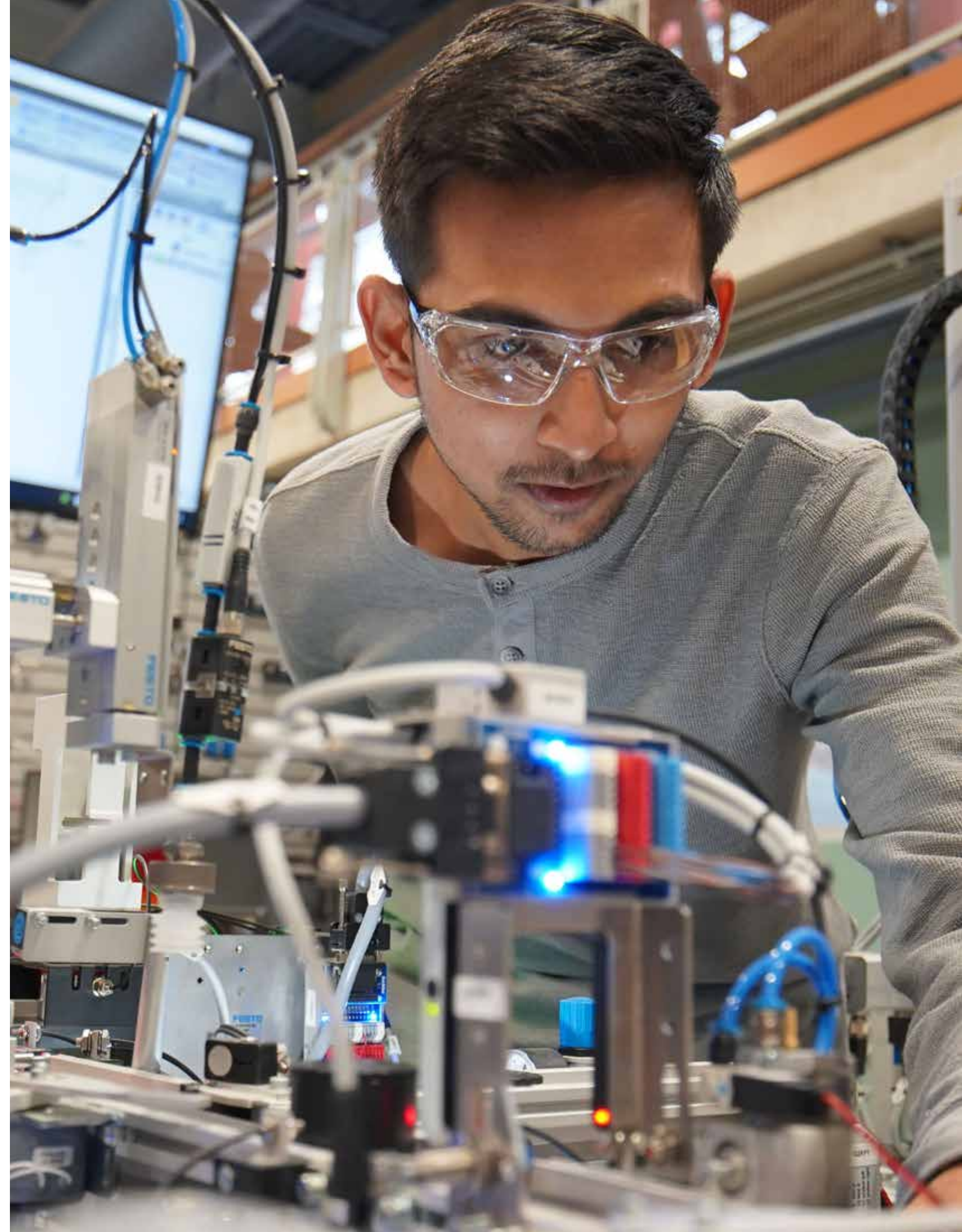
Administrative Governor

Angela Keeley

Student Governor

Maureen Adamson

College President





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