Tech-Access Canada

April 28, 2020

TACs: Are they open for business?

Context:

Tech-Access Canada is the national network of Canada's 60 NSERC-designated Technology Access Centres. These 60 TACs are located in 9 provinces and one territory and have 44 different host colleges/cégeps. Many of the TACs in Quebec operate as registered Not-For-Profit organizations with a separate Board of Directors, though they still have very close ties to their affiliated cégep/college. This model does not yet exist outside of Quebec.

While all members are operating a standard TAC model, our membership is quite diverse in size, region, history, and the key industrial sector they support. Post-secondary education is the jurisdiction of each province and territory, and the TACs themselves operate under many different governance models that impact their day-to-day processes.

With that as context, in early April 2020, we surveyed the TACs to get a better understanding of how many are still open-for-business in light of the COVID-19 pandemic impacting every aspect of public and private life for Canadians. We received 56 submissions, and the following is a summary of the analysis of responses received.

Question 1. Is your TAC continuing to conduct research on-site at your college that is not COVID-19 related?

Responses were split 50/50. 28 of respondents are still operating on-site at their college, while 28 are not, and their teams are only working from home. There was no significant provincial relationship from the responses.

An analysis of response received:

Remote work:

TAC staff work from home wherever possible, using a VPN to access files and collaborate securely. While there were some necessary initial adjustments, work falls into three main categories:

1. Project-specific: project management, analysis, regulatory support, design, modelling, software development, programming, literature reviews, consultations, client approval, etc.
2. Administrative: business development, scoping projects, quoting work, writing grant applications, invoicing, completing milestones, revising policies and procedures, etc.
3. Team-based: meetings and collaborative discussions, coordinating research and service work, discussing phased-in re-entry, etc.

Some employees have received permission to bring specific equipment and tools home with them to complete bench-scale trials.

Emergency research work at the TAC:

Some members have received permission to return to their TAC (whether located on a college campus or offsite) to complete specific tasks, such as checking and cycling power on critical equipment/infrastructure, or strictly scheduled maintenance procedures.

There are strict safety guidelines in place, and access is only for specific tasks covering short periods. Access is restricted to a limited number of TAC staff, and there is no access for students or consultants. Some have instituted a maximum of two people per room and trying to have them work together consistently. Rooms are cleaned and disinfected before arrival and after departure.

Of the TACs able to return to research at their Centre, the college has imposed strict guidelines:

1. Approval from college executive for any individual who will be on-site, with self-declaration forms completed and signed.
2. Notifying campus security every day of their location and time of stay.
3. Adhering to the physical distancing measures as prescribed by the provincial health authority.
4. Protocol for reporting COVID-19 cases or contact with an infected person

There are new challenges and significant costs associated with reconfiguring the facilities and equipment to allow for the prescribed physical distancing for employees.

Projects (at the TAC):

For those permitted to access their facilities, projects fall into two categories:

1. Traditional research projects servicing firms/industries that have been deemed essential by their province, whether the project is COVID-related or not.
2. Projects specifically related to fighting COVID-19.

Other projects for firms that do not fall into one of those two categories are put on hold unless parts of the project can be delivered remotely. These projects get ranked on priority should a gradual return-to-work be permitted.

Partners and Clients:

Concerning new demand and ongoing projects, responses demonstrated that there is no correlation between regions or industries. Many TACs are using this time as an opportunity for business development so that when things start getting back to normal, they will not be starting from square one.

Many firms are in survival mode and are under extreme financial pressure given the impact of the pandemic on their already fragile cashflow. From their perspective, R&D activities were seen as discretionary and have been paused until they are in apposition to stabilize their operations. This is unfortunate as accelerating innovation projects on a broader scale will promote a faster economic recovery for Canada. Many members highlighted the importance that granting agencies and government R&D support programs reduce or eliminate the cash contribution requirement and maintain or increase the in-kind contribution eligibility, at least for the next 18 months in light of the impact the pandemic is having on the predominantly small firms we collaborate with.

Other partners finally have the time and focus to dedicate to the projects that had been sitting on the side of their desk when their core business operations were taking all of their time. They want to engage their staff in the projects with the TACs and now have the time to do so.

An interesting consequence of the pandemic is that many partners are very eager to continue with their applied research projects and technical service engagements to seize a market opportunity, and they are not happy to find out that the TACs are temporarily shut down. They very much want to know when

operations will be back to normal, and the TACs are unable to provide an estimate. This seems analogous to the challenges faced by provincial governments and health authorities dealing with the general public.

Question 2. Are you conducting research offsite at a partner location?

The substantial majority of respondents (75%) are not conducting research offsite at a partner location (42 responded no, 14 responded Yes). There was no significant provincial or sectoral relationship from the responses.

An analysis of response received:

Working at partner locations:

Most of you are not researching with your team on-site at a partner's site. The most cited reason is liability concerns from your centre/host college related to a member of your team contracted COVID while at a partner location and bringing it back to the TAC/college.

Another issue is that many aspects of your projects that take place offsite still depend on your team accessing your labs and equipment. If you are unable to access them, the project plan slows dramatically.

For those who are not conducting R&D at partner locations, but the partner remains open for business, many of you have shifted tasks to the partner's in-house team with your remote guidance and support to keep advancing the project until on-site collaboration can resume.

Those of you still collaborating in-person with your partners at their location are implementing all prescribed physical distancing measures and actively minimizing contact between individuals.

Question 3: What precautions are you taking to mitigate the risk of contamination?

Responses fell into three main categories:

1. Working from home.
2. Following government advised safety protocols.
3. Developing a plan for re-entry post-COVID.

As noted earlier, Working from Home required some initial adjustment, and now allows engaging with clients virtually, and undertaking parts of the projects that lend themselves to remote work.

Those still accessing the labs are following government safety protocols concerning sanitation and disinfection, use of Personal Protective Equipment, physical distancing, using academic labs to maximize space, restricting access to essential staff, and self-isolation if employees become ill or exposed to COVID-19.

Planning for re-entry post-pandemic all seems to follow similar outlines related to which facilities can be re-opened, and what protocols must be in place:

- Business impact assessment (in-house capacity and productivity, partner timelines and responsiveness)
- Safety hazard assessment

- Emergency Response Plan
- Health & Safety procedures (cleaning, PPE, physical distancing, split shifts, work from home, curbside pickup/drop-off of samples, etc.)
- Risk mitigation (transmission, contamination)
- Revised Standard Operating Procedures
- Modified Work Plan
- Phased re-entry plan

Additional comments:

Some other thoughtful comments were received that did not relate directly to any of the above questions:

- Working from home has been a smoother transition for some TAC team members than others. Many team members are also looking after children or other dependents with schools and daycares closed. This change impacts what a typical workday and regular working hours look like. While many excellent telework tools exist, there will always be extraneous factors at home that require additional patience and understanding from management in these unprecedented times. Many organizations are using these virtual tools to attempt to recreate the missing social link, through virtual coffee meetups in the morning, and a cocktail hour on Friday afternoon.
- While this may not be applicable for every TAC, in situations where their host college/cégep is not on the most robust financial footing, the TAC can be seen as a profit centre. Some members have made the case that allowing the TAC to maintain something close to regular operations and servicing industry clients through the fee-for-service model can bring in additional revenue to support the overall health of the institution.
- TACs have world-class facilities, equipment, and expert staff who know how to operate them. The significant infrastructure has been acquired and installed over many years and is geared toward efficient and effective operations, maximizing the potential of every square foot of available space. Depending on how long the pandemic lasts, and what a return to normalcy looks like, the TACs could be facing substantial unforeseen costs to reconfigure their facilities to adhere to physical distancing and other health and safety measures that need to be implemented. Given the exceptional nature of this pandemic, financial support to facilitate efficient compliance with these new requirements will be required by the TACs.
- As noted in the context-setting introduction, many of our members in Quebec operate their Centres as separate legal entities registered as not-for-profit organizations. NSERC has always been accepting of this model, and the TAC still has a very close relationship with its affiliated cégep or college for receiving grants from the College and Community Innovation Program. There are pros and cons of both models of operation, but operating as a registered not-for-profit organization gives the TAC the autonomy to remain open and operational, even if their affiliated college and its campuses are all closed. They need the approval of their Board of Directors, and the resources to maintain operations, but, as a provincially designated essential service, the decision is in their hands. To date, no TAC outside of Quebec operates as a not-for-profit organization.