Maintaining academic continuity in the midst of COVID-19

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Abstract

The delivery of high-quality academic programmes is central to the mission of any university. For this reason, maintaining academic continuity must be a key aspect of their response to a major disruptive event. A previously described model for ensuring academic continuity in universities presented four phases: pre-planning, approaching crisis, crisis and post-crisis. COVID-19, however, has created unique challenges thanks to its global reach, impact on all aspects of societal operations and continuously evolving nature. This article describes the implementation of a model for managing academic continuity in the initial stages of COVID-19, and the continued adaptation of the model as the crisis has continued and work towards recovery has occurred without a clear end in sight. Reflections are offered with respect to: using established policies and processes; grounding decisions in core values; implementing broad and frequent communication; acknowledging and addressing exhaustion; and taking the time mid-COVID-19 to consider lessons learned.

Keywords: academic continuity, higher education, COVID-19, pandemic, academic disruption

INTRODUCTION

COVID-19 has presented significant challenges to organisations of every type across the world. Hospitals have been overburdened with caring for those stricken with severe forms of the illness, while at the same time having to close critical areas such as surgery and radiation therapy. Some businesses, such as those in the travel industry, have seen demand plummet. Other businesses, such as manufacturing, retail and restaurants, are coping with supply chains that have been strangled by border closures or the effects of forced shutdowns. Social service organisations, such as sexual violence centres and mental health counselling, have seen demand increase while being forced to meet this need without the face-to-face contact that is the foundation of their operation. Given their broad scope of operations, universities and colleges have also encountered many of these challenges, including research labs that have had difficulty sourcing the supplies required to develop vaccines and antibody tests; fitness facilities, theatres, libraries and sports arenas that have closed or have restricted public access; residences and food services that have managed social distancing as they have continued to support students unable to return home due to travel restrictions; construction projects that have experienced a range of interruptions; and social and health services such as dental and medical clinics and mental health counselling services that have altered their operations significantly. Central to the mission of colleges and universities, however, is the commitment to the education of students. Consequently, in the midst of the many aspects of their operations affected by COVID-19, academic continuity has been a primary concern for universities, yet it is one that has received surprisingly little attention from the perspective of emergency planning.

Academic continuity refers to the ability of a higher education institution to maintain or resume academic activities in the face of a disruptive event.[1] Events that threaten a university's ability to continue to deliver academic programmes is by no means a novel problem. When the second wave of the Spanish Flu epidemic hit Toronto a century ago, the University of Toronto cancelled lectures for three weeks in the autumn of 1918,[2] a move that paralleled that of other universities around the world.[3,4] Nor is using creative approaches to maintaining continuity novel. Indeed, alternative approaches to delivering academic programmes in universities were used by the French in the Second World War, the Lebanese during the 2006 war and the Americans following Hurricane Katrina.[5,6]

The present authors have previously presented a model for ensuring academic continuity during crisis situations in universities which involved four phases: pre-planning, the approaching crisis, the crisis and post-crisis.[7] The model has served the University of Toronto well in other situations, such as responding to the H1N1 pandemic and in managing labour disruption, and was of great assistance in the initial stages of COVID-19, providing a roadmap for addressing a vast range of considerations. However, as the pandemic and the resultant global disruption continue, the university, like other organisations, faces a period of prolonged uncertainty. In the absence of definitive direction, staff have been forced to plan and offer academic programmes without a clear vision of what will happen next. This article describes the implementation of the University of Toronto model for managing academic continuity in the initial stages of COVID-19 (depicted in Figure 1), and the adaptation of the model as the crisis has continued and work towards recovery goes on without a clear end in sight.

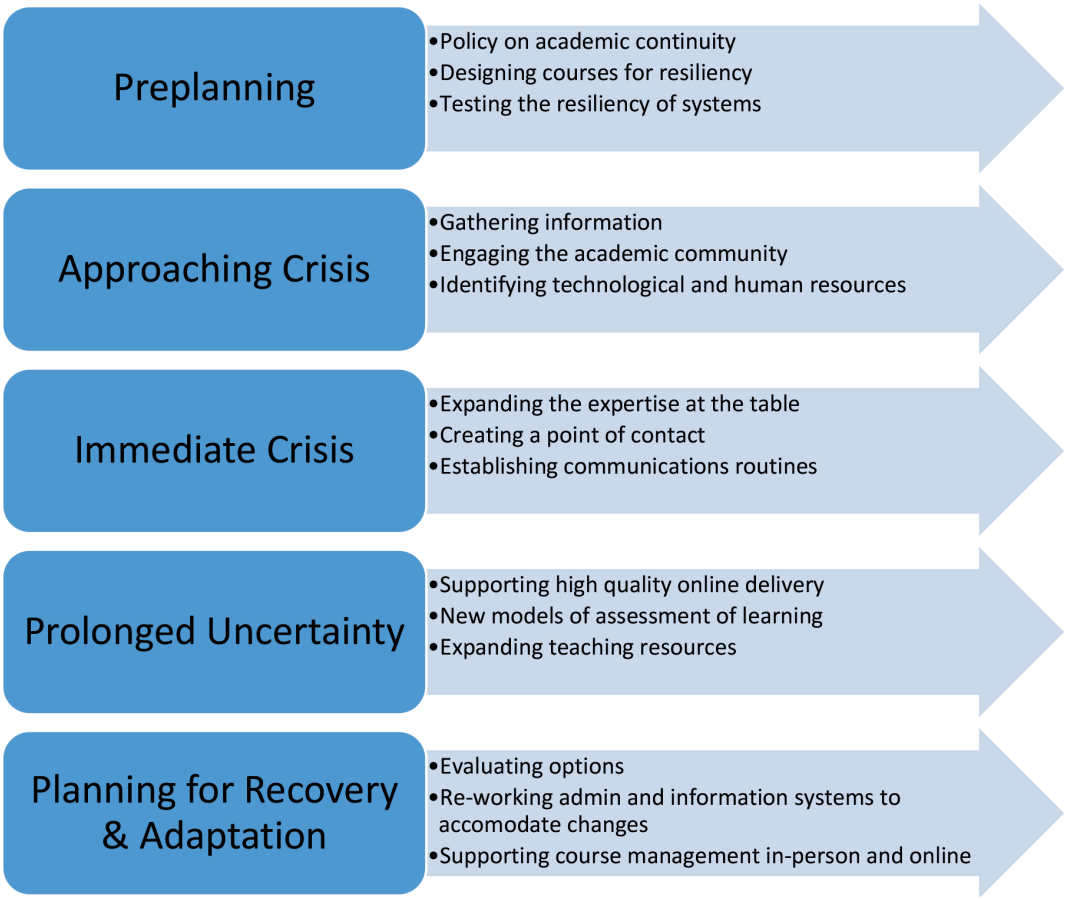

Figure 1: Maintaining academic continuity during COVID-19

PRE-PLANNING

The Academic Continuity Policy at the University of Toronto is part of an overall preparedness strategy that includes a Policy on Crisis and Routine Emergency Preparedness and Response supported by a Framework for Responding to a Crisis or Routine Emergency. Other aspects of the preparedness strategy include business continuity processes and robust procedures for dealing with a range of issues such as risks in research labs, occupational health and safety and animal care. Each of these elements supported the university's overall response to COVID-19.[8]

The Academic Continuity Policy emphasises the university's commitments to providing students with a reasonable opportunity to continue learning and complete academic work in the face of disruptive events; to maintaining the integrity of programmes despite adaptations that may be required; and to providing timely information to students about altered course structures and requirements. It also outlines the expectation that students will remain responsible for meeting academic requirements. Instructors are asked to prepare course syllabi in a manner that promotes course resiliency and allows for continuity, and they are supported to do so through resources provided by educational technologists and teaching and learning strategists. Overall academic programmes

are designed, to the extent possible, to support resiliency. In the event of a crisis, it is anticipated that modes of delivery may need to be changed, assessments may need to be reweighted or revised, and the alternative means for communication with students may be necessary. The Academic Continuity Group is convened every autumn to review the policy and discuss practical steps that should be taken to support academic resiliency should circumstances require it.

As part of the annual academic continuity check, technology systems are appraised and tested for crisis readiness. As a result of past technology appraisals, the university recently upgraded its learning management system. This enhanced its ability to communicate with students, and to integrate a wider range of online learning tools. In addition, an extensive set of electronic resources is available through the library system, and a syllabus service provided by the library assists instructors with building online course reading sets. Educational developers and technology staff assist with course design and the preparation of course materials.

APPROACHING CRISIS

When the Academic Continuity Group held its annual meeting in the autumn of 2019, COVID-19 was not on the horizon. Shortly into the new year, however, as information from China emerged, it became clear that this could become a global health emergency. Indeed, on 25th January, 2020, a resident of Toronto who had recently returned from Wuhan, China, the epicentre of the COVID-19 pandemic, became the first presumptive case of coronavirus in Canada.[9] He was placed in isolation in Sunnybrook Hospital, a teaching hospital partner of the University of Toronto. At that point, the Academic Continuity Group reconvened and began the process of planning for the pandemic. This involved gathering information, engaging the academic community and identifying resources.

Information gathering focused on the manner in which the pandemic was unfolding in other parts of the world, and the types of restrictions that public health agencies might impose. This information helped to shape advice provided to academic units regarding the planning they needed to undertake. Academic resources such as teaching and learning strategists and librarians who could support academic continuity were placed on alert. Information regarding existing technological resources was refreshed and the need for additional licences or other resources was assessed.

As the crisis approached, instructors were reminded about best practices for ensuring course resiliency. Shortly thereafter, as it became increasingly clear that the threat of global spread was growing, instructors were asked to develop a specific plan for each of their courses, to be implemented in the event that widespread public health restrictions were imposed and face-to-face meetings were curtailed. Although the exact nature of the restrictions that could occur was unclear, it was not feasible to ask instructors to plan for multiple scenarios while they were in the midst of a teaching term. Thus, each instructor was asked to create one alternative plan that envisioned a prohibition on in-person classes, with the expectation that the university would walk toward that plan as slowly as it could, and as quickly as it needed to.

INITIAL CRISIS

In early March 2020, as new government and public health restrictions were announced, it became apparent that the university would need to change the mode

of delivery before the end of the winter semester. On 11th March the World Health Organisation declared COVID-19 to be a global pandemic. Two days later, on Friday 13th March, the Province of Ontario announced that schools would be closed for two weeks, and only those businesses on a list of essential services could remain open; the City of Toronto closed recreational facilities, daycares and parks. Consequently, the university issued a statement that all courses would move to remote format effective Monday, 16th March. Over the course of one weekend, almost 6,400 courses, spanning three campuses and 20 faculties and schools, moved online. Shortly thereafter, following government regulations, many other university operations, including libraries, labs that were not conducting COVID-19 research, and recreational facilities, were closed to in-person attendance and, where possible, operations were changed to remote service delivery.

As has been repeatedly noted during times of crisis,[10] people moved quickly into action, demonstrating adaptability, creativity and support for one another. Faculty members and librarians developed spontaneous mutual aid groups, sharing teaching resources and strategies, and providing grassroots seminars for one another. Faculty created online office hours, town halls and chat groups for students. Educational technology staff set up remote assistance drop-in centres for instructors and teaching assistants. Support services moved to establish online connections both with each other and the students they serve. Students expressed gratitude for the efforts made by staff and faculty through social media and group letters.

Nevertheless, this was only the beginning of a vast number of adaptations and modifications that needed to be undertaken. Tasks required in the days and weeks to follow included changing models of assessment or reweighting assignments in individual courses; switching remaining exams to e-proctoring or other formats; reinstituting a previously used online declarations of absence form to replace doctors' notes;[11] and providing students options of credit/no credit in lieu of grades. In an informal survey, faculty reported that their top two concerns during the first month of the crisis were student practicums and internships, and academic integrity. According to Statistics Canada, 35 per cent of students in the postsecondary sector reported that their work-integrated learning opportunities were cancelled or postponed.[12] The majority of these placements were in services, healthcare or education.[13] For students in professional programmes, this required discussions with licensing bodies to seek solutions that would not impede students from progressing or graduating, while at the same time ensuring they had the skills necessary to allow for safe practice with the public.

The move to online assessment proved particularly challenging. Although there is research to indicate that students are not more likely to cheat on online exams,[14–16] there continues to be a heightened level of concern about this issue across the higher education sector. As with many universities, the University of Toronto licenses an e-proctoring system for use in some online courses. However, considerable time and effort is required to set up and administer an exam in this type of system, and given the proximity to the end of the term, the number of courses that could be supported using the e-proctoring system was very limited. When e-proctoring was used, the technology proved challenging. For instance, in one particular course, a substantial number of students were unable to complete an online final exam online because of a connectivity issue. Consequently, the vast majority of courses reweighted assignments, added final papers,

or took other types of approaches to a final assessment for the term.

In reflecting on this period, three actions proved to be exceptionally important. First, a wider circle of people was engaged in the academic continuity process, expanding beyond a single leader from each academic unit (typically a Vice Dean) to multiple representatives, such as registrars and placement staff (for instance co-op programme leads). This larger group of people not only brought a wider range of expertise to the table, but also created additional conduits for reliable information to be shared across the large, decentralised university. The group began to meet virtually ahead of the crisis to practise the process in anticipation that social distancing would be required as it was in other jurisdictions.

Secondly, one universal contact point was created for all e-mail traffic relating to academic continuity. This proved to be critical as the information flow began to overwhelm individuals in key positions. Every issue that arrived through the central point of contact was entered into a tracking system that could be monitored by the core team. The core team of staff handling the communication traffic was expanded, with people being added before they were required for critical roles in order to give them time to become familiar with the established processes.

Thirdly, communication routines were established with the core staff group and the Academic Continuity Group, which eventually included over 100 people. This routine included a daily half-hour morning briefing, followed every afternoon with a written briefing note. These short briefing sessions and notes enabled the fast dissemination of information, and reinforced pathways of communication to reduce chaos. A shared document centre was used to provide key resources to the divisions during this period.

PROLONGED UNCERTAINTY

As days of government mandated restrictions became weeks, planning turned to preparing for an entirely online summer term. Unlike the abrupt changes to winter-term courses, the summer-term courses could be deliberately planned and designed as online courses. During this period, the Academic Continuity Group turned its attention to the development of key resources that would be needed to support faculty through the summer term and into the autumn. People came together to co-develop materials and processes to be used at both the instructor and administrative leader level to enhance the design and delivery of courses. Issues of privacy and security of online participation were addressed. Further, given repeated observations that the country-specific origins of COVID-19 could result in racist responses,[17,18] as had been observed during other pandemics,[19] institutional units worked together to develop strategies and resources for faculty to design and deliver courses that enhanced inclusion and supported a positive online class environment.

Similar to the experience of other universities,[20] demand for summer-term courses was unprecedented, as international students found themselves unable to return home for the summer due to travel restrictions, and employment opportunities for domestic students evaporated. In order to meet the demand, undergraduate units reached out to professional and health science programmes, seeking additional teaching capacity. Mechanisms to financially support teaching across faculties and schools helped foster increased capacity and buffered the budgets of units that could not offer components of their regular programmes. Other challenges that needed to be addressed included accessibility for those with special learning needs; accessibility for students with technology

limitations; and access to texts and other resources when bookstores and libraries were closed.

As time continued, many members of staff became fatigued with the constant need to adapt workplace practices, while at the same time managing disrupted family schedules, and managing the emotional, social and educational needs of their own children who were confined to the house.[21] Some faculty members faced the prospect of teaching a fully online course for the first time, with the realisation that this required a rethinking of both course content and teaching practices. As the period of uncertainty continued, it became increasingly clear that there was not going to be an easily defined date at which life would return to normal. Everyone reluctantly came to the realisation that they would need to plan for an academic year that would also be dramatically altered.

PLANNING FOR RECOVERY AND ADAPTATION

While managing the crisis phase and moving quickly to online delivery presented challenges, planning for the subsequent academic year presents a considerably greater challenge. Public health advice and government requirements change on a daily and sometimes hourly basis, as attempts are made to develop policy to reopen the economy, and manage the behaviour of the public in the face of uncertainty. For example, at one time it was declared that cloth masks were ineffective; at another time masks were declared optional when social distancing was not possible; at yet another time masks were recommended in certain situations and it was suggested that employers should be obligated to provide them, despite scarce supplies of personal protective equipment. Social distancing in Canada's COVID-19 response currently requires two-metre separation between people but what this will look like in the autumn remains unclear; as do answers to questions regarding whether students returning to Canada from abroad will need to be quarantined, or if they will even be permitted into the country.

Public health policy and government policy are central considerations in university decision-making, but public attitudes are also crucial. According to unpublished data collected by the Association of American Universities in May 2020, half the US population would be comfortable sending college-age students back to campus in the autumn, while half would not. When asked how universities should operate in autumn, opinions varied: from open as usual (14 per cent), to open with social distancing (30 per cent); allowing students to choose distance learning (31 per cent); opening with distance learning only (14 per cent); or deferring the entire semester (8 per cent). Similarly, a survey of international students with admission offers from universities in Australia, Canada, the UK and the USA, indicated that the majority (69 per cent) still intended to study abroad as planned. However, a significant number of those intending to study (38 per cent) planned to defer if they were unable to study face-to-face, 31 per cent were willing to begin online and transition to in-person, but only 10 per cent would enrol if the term was fully online. Concerns with online education among the international cohort included missing the international exposure that they were hoping to gain, fears that the teaching quality might be substandard, and fears that their degrees might be viewed as having lesser value.[22]

The course delivery cycle for a university spans several months. New courses are approved by curriculum committees throughout the year; teaching assignments occur in April and are entered into a

system that matches course design and size with instructional spaces in May; and student selection of courses begins in July for a September start. Over the summer, faculty members refresh and design new course content. Extensive modelling was undertaken at the University of Toronto to determine the size and nature of classes that could be accommodated by various social distancing rules. In the end, however, any decision must be taken far in advance of September, both for scheduling purposes and in order to give students sufficient information on which to select their courses given their unique circumstances. It is this complexity that caused many universities to announce early in May that their autumn semester would be entirely online,[23] or indeed that lectures for the entire academic year would be online.[24] At the same time, students in the USA launched lawsuits seeking tuition and fee rebates due to changes in course delivery and services.[25,26]

While online class formats can provide excellent learning opportunities, some critical components of programmes are more challenging to offer online. Health science students are required to practise their professional skills under supervision in order to become licensed to practise. Science programmes rely on laboratory skill development as central components of their education. Further, although online education can be of exceptional quality, and integrate many interactional components, the richness of a university experience includes face-to-face interactions, informal learning opportunities, and the development of new relationships and skills for living. With these factors in mind, planning at the University of Toronto has sought to maximise in-person opportunities to an extent that is safe and feasible.

Nevertheless, the uncertainty and absence of definitive answers has raised frustrations for many. Research from those parts of world first affected by COVID-19 has suggested that while the experience of quarantine itself did not cause heightened anxiety or other forms of psychological distress, dissatisfaction with control measures did influence mental health,[27–29] a finding reflected in research conducted in Toronto during the 2003 SARS outbreak.[30] For instance, a study from Italy revealed that individuals in low COVID-19 contagion areas experienced greater negative effects from social isolation than those in high contagion areas.[31] This speaks to the need to develop measures, including those for academic continuity, that people regard to be fair and proportional to the risk. Other research has pointed to the need for reliable information. For instance, reliance on social media as a source of health information also increased psychological impacts.[32,33]

The uncertainty over the nature of the autumn term creates a challenge for faculty. As a large, complex institution with over 90,000 students, it is not feasible to consider the kind of drastic changes contemplated at smaller universities such as a delay to the start of the term, or block course scheduling. In such a complex institution, any change carries a plethora of implications for students, administrative systems and logistics that are not always immediately apparent. Planning has therefore focused on the most likely scenario, while considering the degree of midcourse adjustments that could be made if conditions get significantly worse or better. In addition, being a large institution affords a range of resources that can be used to create options. The university is deploying this strength in conjunction with value-based decision making to enable a hybrid approach that provides student-centred in-person and online options.

Some of the concrete adjustments in planning for the autumn include booking classrooms only up to the limit that is

allowed given current physical distancing rules, developing protocols for students to enter and leave classrooms and laboratories safely, and creating guides for faculty regarding classroom management in this new environment. Many courses will become 'dual delivery', with in-person and online sections operating concurrently, allowing for a move to a fully online delivery should it be required, but also limiting the variability in conditions for faculty. This type of flexible learning opportunity affords an in-person experience for students who would like to engage on-campus, but also addresses the needs of students who may need to learn from home during part or all of the term. To support communication with students, consistent terminology and course tagging are being developed that will indicate the type of delivery mode being offered so the student knows the nature of the course section in which they are enrolling and can select the model that best suits their needs.

The general consensus is that there will be public health restrictions of some kind in place for a least a year and possibly longer. While it is unlikely that measures will continue to be as restrictive as has been the case, the possibility of lockdowns being reimposed must be entertained. At the same time, there is a need to continue the regular business of the university and ensure that students are able to progress through their academic programmes. To this end, the university is now moving into an adaptation period that includes dedicating some individuals to work on COVID-19 on a longer-term basis while freeing up other individuals to resume non-COVID-19 related activities to allow routine processes to resume and new projects to progress.

To ensure academic progress, the university will take every opportunity to ensure that laboratory learning, practicums and other activities that are best delivered in person, are taking place as soon as they are possible and safe, knowing that these activities may become impossible a few months from now. In addition, weaknesses in information technology systems were identified during the crisis phase as they were stretched beyond their expected load. Planning for the coming academic year, the university is reassessing its educational technology and putting in place the capacity that will serve well over the long term. As this situation continues to unfold, it has made transparent both strengths and areas of weakness in the university's academic systems and structures. Rather than waiting for the pandemic to end before addressing these, the university is now moving to consider how to enhance supports for academic continuity.

MID-COVID-19 REFLECTIONS

COVID-19 presents a challenge to the world unlike any in living memory. At an international research university like the University of Toronto, almost one-quarter of the 90,000 students come from abroad; 53 per cent of undergraduate students engage in experiential learning during their degree programme; 23 per cent engage in learning abroad opportunities; and each term students enrol in over 6,000 courses. Thus, among the many complexities that must be managed during the COVID-19 pandemic, maintaining academic continuity is essential.

The university's policies and planning have served well to date, but success thus far has relied on the dedication, creativity and skill of individuals across the institution who are committed to the university's mission of providing outstanding learning opportunities for its students. At this point in a long and drawn-out crisis, reflections may be offered in the following areas: using established policies

and processes; grounding decisions in core values; communicating broadly and often; acknowledging and addressing exhaustion; and taking the time mid-COVID-19 to reflect on lessons learned.

As an engineer might say, 'don't debate the information on the safety card in the seat back pocket when the plane is skidding off the runway'. While the nature of the situation may call for creative approaches, it is important to make use of existing policies and established processes and avoid altering them without full consideration of the consequences. This allows for some degree of predictability and order in unpredictable times. Policies, like safety procedures, are built on the collective wisdom that comes from past experience, success and failure.

In the midst of crisis, people can feel pressure to take shortcuts, move in a particular direction out of fear, or make decisions based on one particular perspective. Despite the pressure, it is important to collect information on the range of impacts that could arise from any particular course of action. This is facilitated by having a robust consultation network that predates the crisis and is founded on trust and confidence in one another. In addition, decisions and processes must be grounded in core values, and for a university, student-centred approaches.

While an enormous amount of work and planning may be underway, in the absence of broad communication, individual members of the community will assume that nothing is being done and will take it upon themselves to create solutions. Information may be regularly and transparently shared with key members, but may become 'stuck in a loop' and not get to the people who need it. To address these issues effectively, reliable information must be communicated in multiple ways through multiple channels.

As COVID-19 response moves from days, to weeks and now months, people are experiencing exhaustion. It is important to find sustainable ways to operate and relieve those who have been central to the response. This is not only important for addressing the current crisis, but these people will be needed should a concurrent incident occur. In the event that a crisis occurs during the adaptation period, the university will, once again, invoke its framework to respond.

As the realisation hits that the coming academic year will not be what was expected and hoped for, people (including administrators, staff and students) are experiencing a number of emotional responses that are not unlike the stages of grief defined by Kubler-Ross (denial, anger, bargaining, depression and acceptance).[34] People have been experiencing denial and anger at alternating times. It is important to acknowledge these experiences and at the same time encourage: (1) planning based on reality (not bargaining); (2) optimism rather than dismay; and (3) adaptive implementation rather than fatalistic acceptance.

Finally, before moving into the autumn term, and certainly during the year, it will be important to reflect repeatedly on lessons learned because while this may be the largest disruption the university has faced, it will certainly not be the last.

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