Transforming COVID into a Learning Opportunity for Your Students

Spending 1 hour in your class educating students about COVID-19 may change the course of the pandemic. The COVID outbreak is disrupting teaching in many ways, but it also provides incredible learning opportunities.

Instructors can make a huge difference: Universities reach 1.5 million postsecondary students in Canada, and almost 20 million post-secondary students in the United States. By exploring the outbreak in the context of your discipline, students will be able to think critically, act responsibly and share what they learned with their communities – potentially influencing millions of other people in their countries and around the world.

Why should I discuss COVID- 19 in my class?

Over the next few weeks, students will be preoccupied with Coronavirus, worried about their families and friends at home and overseas. They will have difficulty focusing on learning unless you make it relevant to them. Students expressed high levels of frustration after 9/11 and other major world events when faculty avoided discussing current events in class. So consider asking your students to apply the concepts they learned in your course to the situation that is evolving around them.

What are the advantages for instructors?

- **COVID-related learning activities will buy you time** to put your own learning materials online.
- **The data and the resources about COVID are already online**. Your students have access to them from anywhere. More and more scientific data is emerging daily. All you have to do is ask some great questions, structure the activity and encourage students to engage in conversation with each other.
- **Great opportunity for global learning**: Our students are a diverse, multilingual community. They have access to news sources, publications and data in over 100 languages on all continents around the world.

Questions and learning activities in the disciplines:

Questions in any discipline

- How can research/professional practice in our discipline help us better understand the COVID outbreak and individual/societal/global responses to it?
- How can research in our discipline help us inform the response to the COVID outbreak?
- How can we as individuals/ as a community at SFU contribute meaningfully to the health of our community?
- What can you as an individual do to help flatten the curve and reduce the impact of the pandemic?

Public Health, Statistics, Biological Sciences, Biochemistry, Medicine

Simulation of Coronavirus Spread
(1) Researchers at the University of Toronto (David Fishman and Asleigh Tuite) developed an online simulation using global infection data to show how early control measures can slow the spread of Coronavirus.
- Early action on COVID-19 can 'flatten the curve' even more, Toronto researchers urge | CBC News
- Direct link to the simulation:
- https://art-bd.shinyapps.io/nCov_control/
(2) Washington Post Simulation of Coronavirus Spread
- https://www.washingtonpost.com/graphics/2020/world/corona-simulator/

Public Health, Statistics, Biological Sciences, Biochemistry , Medicine continued

How is the impact of the pandemic in Canada likely to differ from the impact in China or Italy?

- Coronavirus: Three reasons why the UK might not look like Italy - BBC News
- https://www.bbc.com/news/uk-51858987
- **Demographic science aids in understanding the spread and fatality rates of COVID-19**
- Authors: Jennifer Beam Dowd*, Valentina Rotondi, Liliana Andriano, David M. Brazel, Per Block, Xuejie Ding, Yan Liu, Melinda C. Mills* Leverhulme Centre for Demographic Science, University of Oxford & Nuffield College, UK
- https://osf.io/fd4rh/?view_only=c2f00dfe3677493faa421fc2ea38e295

Coronavirus vs. other pandemics

- Analyze data provided by the WHO, CDC or regional health authorities: compare the Coronavirus outbreak with 10 year trends in flu outbreaks or other diseases
- https://www.tableau.com/covid-19-coronavirus-data-resources

Communication, Media Studies, Journalism, Public Policy

- Ask students to look up and compare news coverage of Coronavirus in different languages they speak, or in countries they are familiar with
- Conduct a discourse analysis of news coverage in English from different continents (such as Al-Jazeera, Deutsche Welle, India Today, France24, Hong Kong Free Press)

History

- Ask students to compare the 1918 Spanish Flu with the Coronavirus pandemic. A number of articles have been circulating in the media, such as:
  - https://www.nytimes.com/2020/03/09/health/coronavirus-is-very-different-from-the-spanish-flu-of-1918-heres-how.html
  - https://www.history.com/news/spanish-flu-pandemic-response-cities
- Ask students to explore the impact of pandemics on ancient civilizations
- Discuss the connection between pandemics and colonization

Economics, Business

- Explore the global economic impact of the coronavirus outbreak
- Estimate the global cost of travel disruptions
- Compare how companies/banks/governments around the world are responding
- *Conduct a simulation*: Students imagine that they are the leaders of different size companies in different parts of the world. Ask them to explore and estimate the impact of the pandemic on their operations, supply chains, HR policies. Ask how they would "pandemic proof" a new company and protect the health of their employees.

Philosophy and Ethics

- Discussion of individual freedom vs. voluntary self-isolation for the good of the community
- Comparing the approach different countries have taken to limit the spread of the pandemic (ask students to find resources and post online)
- Ethical issues involved in limiting the movement of individuals

- Ethical dilemmas involved when there isn't sufficient capacity in hospitals to accept all patients

Philosophy and Ethics continued

- Ethical issues in research during global health emergencies:
- https://www.nuffieldbioethics.org/publications/research-in-global-health-emergencies
- How do you see the principles of civic society in action during a pandemic?

Sociology and Social Work

- What types of equity/diversity/inclusion issues do you see arise in the response to Covid-19?
- If you were the major of a city, head of a company or university, what considerations would you have to take into account to make sure that members of your community have equitable access to health care and other supports during a pandemic?

Political Science/International Studies

- Ask students to explore impact of Coronavirus on elections (US, France local elections; Paris mayoral election)
- Compare the policy responses to COVID in different countries, ask students to compare the statements/rhetoric of different heads of state.
- *Conduct an online simulation*: Ask students to imagine that they are joining a cabinet meeting in a country that is considering its possible responses to Covid-19 and need to decide what measures to implement, and what the impact might be. (Such as restricting travel, closing borders, sharing stock of medical equipment with neighbouring countries, closing schools) *Choose a country that has not announced a clear response yet, and students don't know too much about, but one that students can research*.

Kinesiology

- Tokyo Olympics Simulation – Online Discussion in Teams: Students imagine that they are serving on the organizing committee of the Tokyo 2020 Olympics. What questions would the committee need to consider and what data would be committee need to have in order to decide whether or not to postpone the games?