

Appendix 2

Institutional partnerships

There are many partnerships that made the FRC game possible:

I, Dr. Bogdan received funding from SSHRC Postdoctoral Fellowship and Marine Environmental Observation, Prediction and Response Network (MEOPAR) Postdoctoral Fellowship for developing the FRC game as part of my postdoctoral research project. Heather Murdock was working for northwest hydraulic consultants at the time and her company provided time for her to work on the FRC game in-kind. Upon arriving to UW I reached out to Centre for Teaching Excellence and Dr. Kyle Scholz took the time share with me over coffee all the different supports and resources available at UWaterloo, including the LITE Grant. I then attended a postdoc welcome week events and Dr. Jeff Casello Associate Vice President, Graduate Studies and Postdoctoral Affairs, introduced me to Dr. Nadine Ibrahim and I invited her to the first FRC game pilot. She brought with her, Sina Golchi, who was her RA at the time

Hiring Sina as an RA for the game was made possible by the generous funding provided by the Learning Innovation and Teaching Enhancement (LITE) Seed Grant, or LITE grant headed by Dr. Daniel Henstra in the department of Political Science as well as funding from Dr. Jason Thistlethwaite at the School of Environment, Enterprise, and Development. Henstra and Thistlethwaite lead the FloodGov research team of which I was a part during my postdoc. The LITE grant also funds Shaieree Cottar as the new RA. AC was funded by the Turkstra Chair in Urban Engineering, at the University of Waterloo

Instructors

AT the University of Waterloo: Dr. Nadine Ibrahim is the instructor for the 3rd year core civil engineering course, with 4th year geological engineering students taking the course as a technical elective. She saw value in running this game for engineering students and is a co-applicant on the LITE Grant. In Jan. 2021 we piloted the online version of the FRC game at Brock University with Dr. Julia Baird 's 3rd year water management course. In the winter semester of 2022, we ran the online FRC game again in the same course. This time instructed by Dr. Luis Silva.

Students as participants

At Waterloo, students were in the Civil Engineering Systems and Project Management course, and at Brock, students were in the water resources management course in the Department of Geography and Tourism Studies. Students put theory to practice and demonstrated the effectiveness of role-playing and social learning.

Teaching Assistants

There were 3 TA's from the engineering course They participated as facilitators after receiving training on how to play and facilitate the FRC game.

Facilitators and mentors

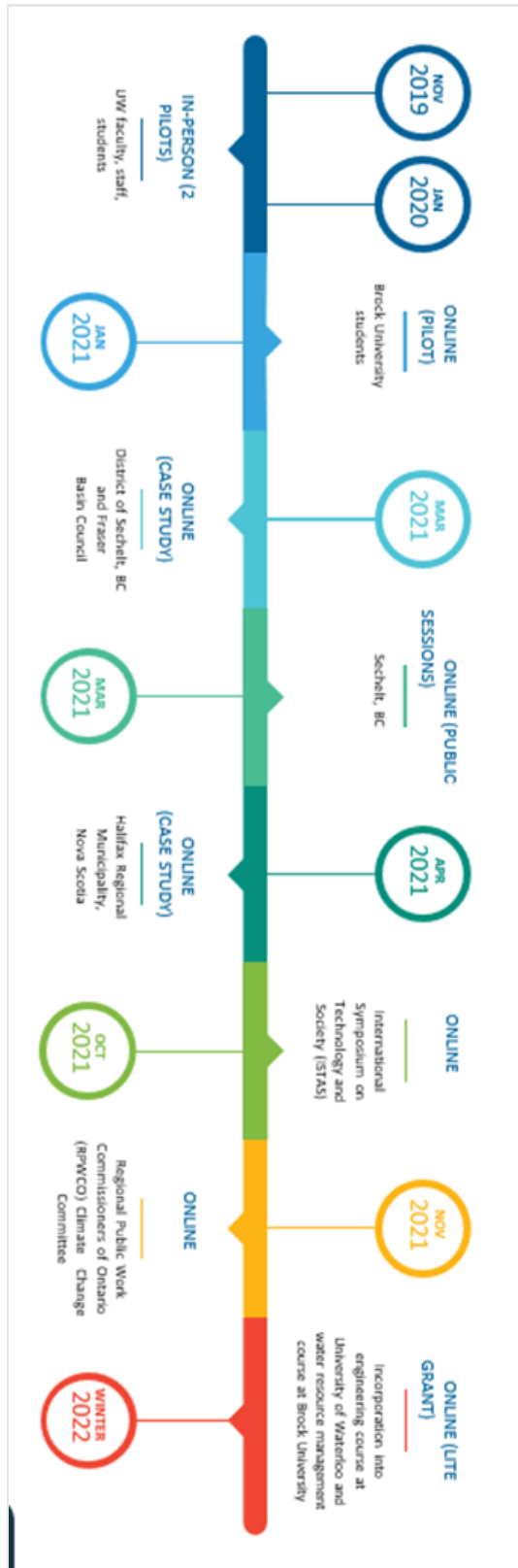
The LITE Grants are funded by the Office of the Associate Vice-President, Academic (AVP-A). They are administered as a partnership between the Centre for Teaching Excellence and the Office of the AVP-A.

14 new and returning facilitators and mentors were key in the running of the game because of their familiarity and experience. The facilitator role involved facilitating a gameboard for 20 players in a Zoom breakout room and providing instructions and prompts when needed. The facilitator also oversaw the FRC companion web app for each gameboard. The mentor's role was to observe the players and answer questions they might have about what real-life stakeholders might do or what a real-life scenario would look like.

Interdisciplinary collaborations

Multiple disciplinary collaborations range from sociology to various engineering disciplines and design, as you can see on the word cloud. by the FRC team (demonstrating hydrotechnical engineering, environmental and disaster sociology, graphic and game design, geography and environmental management, civil and environmental engineering), and by students (civil engineering, geological engineering, coastal and water resources engineering), in addition to facilitators and mentors (from disciplines that include natural conservation, systems design engineering, environmental engineering, water resources engineering, community planning, and grad students in civil and environmental engineering)

Appendix 3



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