## THE FACULTY OF EDUCATION PRESENTS

Title: Teaching with GIS: Enhancing Spatial Intelligence through Geographic Inquiry in Ocean Mapping

Thursday, March 10th, 2022: 12:30 - 2:00 pm



Paul Elliott is coming to the Ph.D. program with a diverse background of education and work experience. For the past 14 years, Paul has been employed within the School of Ocean Technology at the Marine Institute of Memorial University of Newfoundland. His current duties include being both the Academic Director and Instructor within the new Master of Applied Ocean Technology (Ocean Mapping) program. He also teaches several core courses within the Diploma of Technology (Ocean Mapping) program, as well as a series of service courses to other programs and Schools at the Marine Institute that range from Geographic Information Systems, Remote Sensing, Underwater Acoustics, Nautical Chart Production, Computer Programming, Web-based Mapping, Application Development, Advanced Geospatial Data Management, Computer Networking, Hydrography and Tides, Surveying and GPS, Marine Geology and Geophysics, Seamanship, and Project Management.

Preparing students to work within the dynamic and challenging ocean mapping sector requires the development of a comprehensive and transferable skill set. Ocean mapping graduates should be well-equipped to adapt to any given situational context. However, according to those in the industry, there seems to be an issue when it comes to solving problems that deviate from the typical work flows and best practices. This suggests that students have difficulty applying their knowledge and expertise in novel situations. To better understand this issue, the research to be conducted will have a 'teaching with GIS' philosophy that will aim to enhance spatial intelligence through geographic inquiry. This approach will lead to the development and implementation of explicit and critically reflective training within the Ocean Mapping program. The anticipated goal of the research is to determine if explicit and critically reflective training will affect spatial intelligence and to offer the students a platform to implement the complete 'plan-to-product' workflow to novel situations as a means of measuring whether or not this approach would be effective in augmenting spatial intelligence and reasoning.

