

**Submission: T-2020-188-67**

**Title Isumaqtigingniq: Building An Educational Bridge Of Inuit Knowledge And Science To Inspire NexGen Arctic Observers**

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Theme 1: Design, Optimization and Implementation of the Observing System

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Poster title (brief) Isumaqtigingniq: Building An Educational Bridge Of Inuit Knowledge And Science To Inspire NexGen Arctic Observers

Abstract - text box

How do we inspire the next generation of Arctic Observers? This proposed study will integrate Inuit Qaujimaqatuqangit (IQ), described as “the Inuit way of knowing,” and science to form I-STEM, a new integrated approach to teach students in secondary education. These two methods of observing and understanding the natural and physical world each have useful and insightful methodologies; integrated through Isumaqtigingniq (Inuktitut for “thinking together”) they offer a transformative learning experience for NexGen Arctic Observers. Holders of IQ and scientists seldom fully comprehend the discipline or practice of the other, and even less often do they actively integrate these knowledge approaches. Indigenous youth rarely have a welcoming entree through IQ into scientific studies. Similarly, students in countries adopting scientific study or STEM as part of their core curriculum rarely get introduced to IQ or other forms of indigenous knowledge unless they pursue more advanced studies. Social and emotional learning values, and exposure to a new models of thinking, will be bridged through integrated studies, and observing networks of narwhal research. The resulting educational modules in written and video formats will include Social, Environmental, Economic, STEM, ICE (Inuktitut Culture and Entrepreneurship), and a summary case study. The hybrid program will draw on examples from narwhal studies and include United Nations Sustainable Development Goals 4-5 and 8-17. Introduction of the educational modules to 200 Inuit, Canadian and American youth in high school will present this new pathway for youth to enter both the STEM and IQ research observing communities.