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# COIL@UArctic: inclusive approaches to educational network development.

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# COIL@UARCTIC: INCLUSIVE APPROACHES TO EDUCATIONAL NETWORK DEVELOPMENT

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## Abstract

COIL@UARctic is a new University of the Arctic thematic network designed to promote and facilitate collaborative online international learning and biodiversity education. COIL (Collaborative Online International Learning) is a sustained educational approach where groups or individual students from one institution collaborate with groups or individual students from another institution, in a different country and/or culture, on sustained and assessed projects or assignments, developed collaboratively by tutors from each partner institution. The learning takes place online using freely available and commonly used communication technology. This type of cost-effective, experiential learning promotes intercultural competence, as well as the attitudes and reflective behavioural skills vital for a globalised economy. Students who undertake COIL projects use real-world scenarios to learn how to research global issues, set objectives, coordinate time zones and schedules, complete tasks, and navigate communication, language, and organisational challenges within and between international teams. The COIL@UARctic network is designed to promote unique educational opportunities and higher academic collaboration, enabling more people to harness and contribute to the growing body of knowledge, expertise, networks, and pedagogical advantages COIL offers students and faculty in the post-pandemic, technologically blended educational context. The network's focus on biodiversity education has the potential to provide knowledge for better lives and environments for all UARctic and non-UARctic members. Since October 2023, alongside faculty partners from Eastern Finland, Maine USA, Iceland, Canada, and Scotland; an Indigenous consultant from Alaska has been involved in the design of the thematic network to promote inclusivity in the development process and final deliverables which include an extensive set of web-based resources and training. Students from partner countries were also consulted about their views on COIL pedagogy and the COIL@UARctic network through an online focus group helping to inform the network development. This paper will share the key outcomes and reflections from the experience of seeking to adopt an inclusive approach to the development of a new international educational network.

Keywords: COIL, Arctic, inclusion.

## 1 INTRODUCTION

COIL or Collaborative Online International Learning is a sustained educational approach where groups or individual students from one institution collaborate with groups or individual students from another institution, in a different country and/or culture, on sustained and assessed projects or assignments, developed collaboratively by tutors from each partner institution. The collaborative work takes place online, using freely available and commonly used communication technology, such as MS Teams, Zoom, etc. COIL projects can involve any topic, subject or discipline and are often interdisciplinary. Biodiversity is one example of how COIL pedagogy can be applied. <sup>[1]</sup>

COIL, which is part of the growing field of Virtual Exchange, Telecollaboration, and Globally Networked Learning, was pioneered by the SUNY COIL Center more than 15 years ago with the vision of “a world free from implicit bias, where people engage across differences to fully connect with others, believing in an educational environment that fosters shared values, mutual understanding, and critical digital literacy, and which promotes interaction across boundaries to develop leadership, collaborative problem solving and contextualized decision making.” <sup>[2]</sup> The COIL model uses free, online tools and removes the need for physical travel, conserving resources, and maximising participation for students and faculty.

This type of experiential learning promotes intercultural competence, as well as the attitudes and reflective behavioural skills that are vital for a globalized society and economy. Rapid technological advances in international trade, and more recently the Covid-19 pandemic, have had a profound effect on the way people work and communicate in a borderless, virtual environment. To remain competitive amid dynamic and global uncertainty, employers need graduates who have future-proofed skills such

as ongoing knowledge acquisition, competency, creativity, confidence, flexibility, and resilience. <sup>[3]</sup> The COIL@UArctic thematic network seeks to develop these attributes with participants.

There is a growing body of international, practice-based, evidence that suggests that participants consider COIL to be a worthwhile, engaging experience that enhances transferable skill development and employability, promotes intercultural and digital competency, and provides a platform to address issues of common or global concern by engaging highly heterogeneous, geographically, and demographically diverse groups. <sup>[2] [3] [4] [5]</sup>

COIL@UArctic is a future-focused, globally-connected, virtual learning strategy for UArctic members and non-members with a focus on Biodiversity Education. The University of Eastern Finland, the University of Helsinki, the University of Oulu, the University of Turku, and the University of Jyväskylä have launched a joint project to develop a nationwide Finnish Biodiversity Education initiative. It will explore further opportunities for multi-disciplinary collaboration, including e.g., geographical, social, and economic, as well as perspectives from Indigenous peoples. New research ideas will be developed and needs for biodiversity-related education will be identified. The Finnish Biodiversity Education initiative is at the centre of the COIL@UArctic thematic network, helping to illustrate how COIL can be used to address important global issues and providing a ready-made platform for UArctic members to collaborate in this area. <sup>[1]</sup>

## **1.1 COIL@UArctic Project Aims**

The COIL@UArctic project aims to promote and enable wider engagement with COIL as part of UArctic's future-focussed, globally-connected, virtual learning strategy; focus on COIL topics related to biodiversity and the UN Sustainable Development Goals (SDGs) for the well-being of people and the planet; enhance student employability within the Arctic region through the development of interdisciplinary, digital, and transferable skill development using COIL; and democratise student mobility and strengthen internationalisation at home through the expansion of COIL knowledge and opportunities across the Arctic region, with an emphasis on Indigenous community participation.

## **1.2 COIL@UArctic Project Deliverables**

The COIL@UArctic project team committed to the following deliverables within the first year and achieved all of them successfully: A COIL Thematic Network on the UArctic website explaining what COIL is, what the benefits are, and how prospective partners can connect. It also enables international partner institutions to identify and collaborate with UArctic staff and students in a structured, streamlined, and measurable way; COIL Resources and Toolkit for faculty and students on the UArctic website including project start-up guidelines, best practice examples and case studies, COIL teaching, learning and assessment resources, digital skills support, internal and external training opportunities, peer support, and access to global COIL networks. This enables staff to easily access the information and resources they need to design, deliver, and evaluate their COIL projects; Biodiversity and SDG education materials that help to illustrate how a successful COIL initiative works including a ready-made network on the theme of biodiversity; and Virtual Workshops supporting the adoption of COIL as a recognised teaching and learning approach across the Arctic region. This allows more people to harness and contribute to the growing body of knowledge, expertise, networks, and pedagogical advantages that COIL can offer to staff and students.

## **2 METHODOLOGY**

At the start of the project, it was recognised that the involvement of faculty, students, and an Indigenous consultant with knowledge and experience of Arctic-related COIL education, in the creation of the COIL@UArctic network and resources, would help to tailor it to the specific needs of the people and communities who will use it.

### **2.1 Faculty Partner Engagement**

The faculty partners represent a range of disciplinary, geographical, and academic backgrounds, all of whom have direct experience of, and expertise in, COIL and/or Arctic education.

The Thematic Lead is from Robert Gordon University (RGU), Scotland, UK. Her qualifications include an MA(Hons) in Social Science and postgraduate certificates in Public Relations, Higher Education Learning and Teaching, and Research Methods. She is currently studying for a PhD in the field of

Collaborative Online International Learning (COIL), is an Accredited Member and Fellow of the Chartered Institute of Public Relations, and a Fellow of the Higher Education Academy in the UK.

The Project Co-Ordinator is an Early Career Researcher at Robert Gordon University in Aberdeen, Scotland. Her research is rooted in the concepts of place, community, rurality and islandness, and their unique manifestation in each tourism destination, creating distinct sustainability needs, values and success definitions. In addition to her research, she works on developing Collaborative Online International Learning (COIL) resources at RGU.

The Vice-leader and Contact on Biodiversity is from the Department of Environmental and Biological Sciences, University of Eastern Finland, Finland. She has been developing transformative education relating to biodiversity loss and climate change. At UEF, they have produced basic courses (Biodiversity. now A and Biodiversity. now B) in national collaboration (Biodiversity Education Network) and are currently identifying needs for new courses, relating e.g. Nature Based Solutions (NBS) and Invasive Alien Species in a new eNABIS EU/Horizon project.

The Director of Population Health at the Catherine Cutler Institute, Muskie School of Public Service, University of Southern Maine, USA has leadership and management responsibilities within the program area and the Integrated Management Team of the Cutler Institute. She coordinates the Certificate of Graduate Study in Healthcare Quality and Patient Safety in the public health academic program. She currently teaches quality improvement, patient safety, and health literacy courses in the Graduate Program in Public Health and quality improvement for the School of Nursing graduate degree programs.

The Associate Director of Global Initiatives and Partnership Development at Conestoga College Institute of Technology and Advanced Learning, Ontario, Canada works closely with the international office and the academic schools to plan, develop, and manage the expansion of quality outbound global initiatives for students and faculty, including education abroad programming, other academic partnerships, research partnerships, exchanges, virtual exchanges (COIL), and on-campus activities helping to internationalize the Conestoga Community. She completed her Doctoral studies at the University of Western Ontario in Educational Leadership. Her dissertation addressed the implementation of virtual global initiatives (COIL/VE) in post-secondary institutions.

The Research Chair in Community Disaster Research at Mount Royal University, Alberta, Canada has over 17 years devoted to Indigenous community-based research. He has made significant contributions across diverse domains, including Indigenous community disaster research, decolonization, resilience, and Indigenous environmental resource management. Through interdisciplinary research and a steadfast commitment to global Indigenous sustainability, he continues to drive impactful research initiatives worldwide.

The Principal Consultant of L.E.A.D. Educational Consultants is a COIL 'graduate' having participated with a COIL partner from El Universidad de Mexico, Oaxaca in the spring, of 2021. Other partners include Dr Antonia Thomas, Programme Leader MA Contemporary Art and Archaeology, Archaeology Institute UHI, University of the Highlands and Islands, Orkney, Scotland; and Dr Mariana Tamayo, Associate Professor, Environment and Natural Resources, Faculty of Life and Environmental Sciences, University of Iceland, Reykjavik, Iceland, both of whom contributed their knowledge and experience of working and teaching in the Arctic and Northern region to the project.

## **2.2 Student Engagement**

To help construct a suitable content plan for the website, a student perspective was required to consider the support and resources available and to assess any barriers to using COIL as a teaching and learning approach across the Arctic region. Therefore, a focus group was held with participants from the International Graduate Student Research Cohort (IGSRC) who had recently participated in a COIL research project concerning the blue economy and the triple bottom line in the Arctic region. There were three participants from the USA, Canada, and Scotland researching sustainable tourism, adult healthcare, and the co-production of knowledge with Indigenous Arctic communities. Written consent was received from the IGSRC Lead, focus group participants, and RGU Ethics Committee.

The first half of the focus group was loosely structured around the following question areas: participant experience and perceptions of COIL; skill and competency development through COIL; challenges and difficulties associated with COIL; and the type of support needed to engage with COIL. The second half went on to explore the proposed website content and resources in more depth including the kind of academic topics or themes the COIL@UArctic website should focus on; the type of features that would make the website more appealing and accessible for students and faculty across the Arctic region; the

ethical challenges that should be considered in the creation of the website; and anything else participants thought the website should include or do differently.

The primary data was recorded and transcribed using Zoom software. Due to the small sample size, data coding and thematic analysis were conducted manually by the researcher with each participant receiving a unique numerical code. Key themes were identified by selecting keywords and quotations, coding, theming, and interpreting them to form preliminary assertions that informed the final COIL@UArctic resource.

## 2.3 Indigenous Consultancy

The UArctic Assembly, COIL@UArctic faculty partners, and the COIL@UArctic student focus group all highlighted the importance of involving Indigenous expertise in the project from the beginning, therefore, funding was secured to employ an Indigenous consultant. The primary purpose of the consultancy was to ensure the COIL@UArctic website addressed the needs of Indigenous peoples in the Arctic regarding their requirements for online education and to explore further opportunities for appropriate and desirable multi-disciplinary, online collaboration with these communities. The project involved the co-development of the COIL@UArctic web resource explaining what COIL is, what the benefits are, and how prospective partners can connect. In addition to advising on COIL pedagogy and project start-up guidelines, the consultant produced resources for collaboration with potential partners from Indigenous communities, emphasising the benefits of such collaboration for Indigenous communities and students, and the importance of addressing the needs of these communities in COIL@UArctic projects. Topics included: requirements and standards of online learning in Indigenous education in the Arctic; subjects for COIL projects relevant to Indigenous peoples in the Arctic; ethical considerations in collaborative projects; and specific guidance on working with various Indigenous communities.

The Indigenous consultant who was appointed is the owner and principal consultant at Sauyaq Solutions, specialising in research, evaluation, and technical assistance for and with Indigenous Tribes, communities, and organizations. Raised in Homer, Alaska, she is Iñupiaq and a citizen of the Nome Eskimo Community and the US. Named Sauyaq, after the drum used in Iñupiaq gatherings, she also received the name Kwamboka from her Kenyan Kisii family, symbolizing cultural bridge-crossing. She holds a PhD in Indigenous Studies with a concentration in Indigenous Sustainability. Her work highlights links between culture and well-being, addresses sustainability and justice, emphasizes connectedness with nonhuman and more than human kin, and speaks about the importance of listening to Indigenous Knowledges. She is a boundary spanner between knowledge systems and a science diplomat who communicates research to policymakers and has previously served in the federal government and nonprofit world. She is currently an Arctic Fulbright scholar, on the Arctic Research Consortium of the US Board of Directors; co-chair for the International Conferences on Arctic Research Planning IV Understanding Vulnerability; Resilience of Arctic Environments and Societies: Supporting Sustainable Development Priority; an expert in cultural heritage and Indigenous sustainability for the U.S. Department of State Speaker Program; adjunct faculty for American University's Measurement and Evaluation program; and on multiple advisory boards. She also co-led and organized the Global Indigenous Youth Summit on Climate Change in 2023 and served on the US National Academy of Sciences Co-Production of Environmental Knowledge, Methods, and Approaches committee.

## 3 RESULTS

The results include reflections from the project partners, focus group participant perceptions, and output and reflections from the Indigenous consultant, all of which informed the final development of the COIL@UArctic network and resources.

### 3.1 Partner Reflections

Partner reflections about COIL and the COIL@UArctic project revealed a strong passion and commitment to COIL pedagogy and widening access to COIL:

*"I am a passionate advocate for removing boundaries to education and skills development for students using COIL pedagogy."*

*"I did not hesitate to support the COIL@UArctic project as it provides open access resources, something that I know is much needed in the world of COIL, to institutions around the world. It helps professors and leaders who are committed to providing equitable*

*virtual mobility opportunities to students through the method of COIL/VE. This project helps us fulfil our commitment to provide as many students as possible with access to programs that help them acquire global skills and competencies and also helps us share knowledge and experience of COIL/VE with COIL champions around the world."*

The importance of using COIL to address important global issues such as sustainability and biodiversity loss was also highlighted:

*"In the COIL@UArctic project, I aim to promote biodiversity-related education relating to Arctic environments, biodiversity loss and climate change."*

*"As a community-based researcher, I joined COIL@UArctic to leverage its interdisciplinary and intercultural virtual learning platform for fostering responsible research and education. This collaboration aligns with my commitment to enhancing community needs in disaster resiliency research. By engaging with COIL, I aim to address urgent biodiversity challenges and promote sustainable development within Indigenous, Black, and racialized immigrant communities."*

The partners also emphasised the benefits that participation in COIL brings including the development of global connections and the rewarding nature of this type of collaboration:

*"I have long supported connections with academic and community partners through North Atlantic projects. There has been shared knowledge, innovation, and true joy with these collaborations. COIL offers a simple, yet effective, best practice methodology for international collaboration that results in meaningful global experiences for both students and faculty."*

*"It was an amazing experience collaborating with my partner in teacher education in Oaxaca! Over six weeks in COIL she and I developed a mini course for preservice teachers and in the fall of 2021, we launched our online mini course bringing together teacher candidates from Memphis, TN (my school) and Oaxaca, Mexico! Our students learned so much about teaching practices as did my professor counterpart and myself. It was a truly engaging and rewarding experience!"*

These statements reveal a wealth of knowledge and enthusiasm for COIL and COIL-related activities among the project partners. This was vital to ensuring the network and resources were informed and designed by people who understand how it works and the benefits that COIL can bring.

### **3.2 Student Perceptions**

Four over-arching themes emerged from the student focus group including the benefits of COIL; support that is needed to participate in COIL; what content and features the website should include and the kind of topic areas that should be considered.

The benefits that COIL brings include: developing intercultural acceptance, sensitivity, and competence; developing technical, digital, remote team working, and time management skills; developing feedback resilience, communication, presentation, and networking skills; democratising mobility and internationalising the curriculum; and promoting inter-disciplinarity, inter-connectedness, and problem-solving.

The students agreed that COIL requires a clear structure, support, and mentoring; time to socialise and acclimatise to the approach; and alignment of student and faculty expectations across all partners. They suggested the COIL website should include a 'one-stop shop' with links to useful resources; why and how to do COIL and benefits for participants; examples of successful COIL projects with hints and tips from participants; opportunities to connect with people in discussion fora about COIL experiences; guidance on intercultural communication and navigating time-zone/systemic differences; regular email updates - collating network news in one place; events and activities promoted on social media e.g. LinkedIn; COIL project and partner opportunities; and COIL partner profiles and testimonials.

The topics that students felt should be prioritised included sustainability: "Quadruple bottom line. Revisit sustainability from a holistic, inter-disciplinary, inter-cultural perspective." However, they also referred to the flexible nature of COIL in any context: "Any topic applied to the Arctic context. It is a very versatile approach to international and inter-disciplinary learning." The students also highlighted the importance of using COIL to promote inclusivity, placing people at the centre of COIL projects: "Address stereotypes. Show the heterogeneity of people, life, and culture in the Arctic region."; "Make projects people-centred

and include students from all over the world to build a better understanding of the Arctic.” and “Nothing about us without us! Indigenous communities should be involved from the beginning and co-producers of knowledge.”

### **3.3 Indigenous Consultant Output and Reflections**

Before working with Indigenous communities and people, the Indigenous consultant for this project recommends that it is important to educate yourself as much as you can on who your partners are, their history with colonization, and any other resources provided, as ignorant statements can often come across as threatening and/or harmful. Being open-minded to more than one knowledge system and way of seeing the world is also key to respecting all involved. <sup>[1]</sup>

The Indigenous consultant produced a comprehensive and highly accessible range of resources and guidance to help COIL@UArctic participants approach Indigenous communities and projects in an appropriate manner. These resources have utility well beyond the confines of COIL and are recommended to anyone interested in learning more about this important area. Topics covered on the website include an Introduction to Indigenous Peoples; Definitions; Indigenous Peoples; Indigenous Languages and Lands; Indigenous Communities; Indigenous Knowledge; Colonization and Settler Colonialism; Indigenous Sovereignty and Rights of Indigenous Peoples; Regional Colonial Policy Context; General Understanding of History, Culture, and Indigenous Knowledge; Academic Considerations; and an associated reading list. The COIL@UArctic website also includes ethical guidelines and considerations on how to work with Indigenous students, staff, and their communities including Building Ethical Partnerships; Co-production of Knowledge (CPK); Ethical Research; Ethical Knowledge Sharing and Data Sovereignty; Verbal Communication and Language; and Written Style Guides.

The Indigenous consultant’s final reflection on the project helps to illustrate why an inclusive approach to educational network development is so important: “As an Inupiaq Indigenous person hearing stories my whole life of how outsiders coming to our communities have caused us harm--colonization, research abuses, boarding school--outsiders want to assimilate us into their ways of living and knowing while never: listening to us, valuing our way of life, or our ways of knowing. The COIL program offers an opportunity for respectful learning from one another, engaging in reciprocity, relationship building, and so much more. These relationships between youth and in spaces of learning build a new future of how Indigenous and outside communities interact, build knowledge based on two-eyed seeing to inform decision-making, and open up space for understanding who we are, our ways of knowing, being, valuing, and living in kinship with the world.”

## **4 CONCLUSIONS**

The involvement of faculty and students with knowledge and experience of Arctic-related COIL education, as well as an Indigenous scholar/consultant, in the creation of the COIL@UArctic network and resources, helped to tailor it to the needs of the people and communities who will use it. In recognition of this work, the network was fully endorsed by the UArctic Assembly on 3rd June 2024. Key learning points from the project include the importance of involving Indigenous expertise from the start; setting a realistic budget; providing a clear brief and support for everyone involved; holding regular meetings and communication with partners; being flexible and adaptable; sharing knowledge widely; and adopting a commitment to ongoing review and enhancement in consultation with end-users.

### **4.1 Next Steps**

Moving forward the project team will continue to build the network of COIL@UArctic partners and projects, and continuously review and enhance the web-based resources and training. Future research will investigate the views and experiences of Indigenous students and faculty living in the Arctic region concerning COIL pedagogy and the COIL@UArctic network and resources.

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