

Faculty of Education
supporting the
UN's Sustainable Development Goals



Empowering Teacher Candidates in a Digital World

Amid rapid technological advancements, the imperative to equip future teachers with robust educational technology skills is clearer than ever. Accordingly, this project aims at:

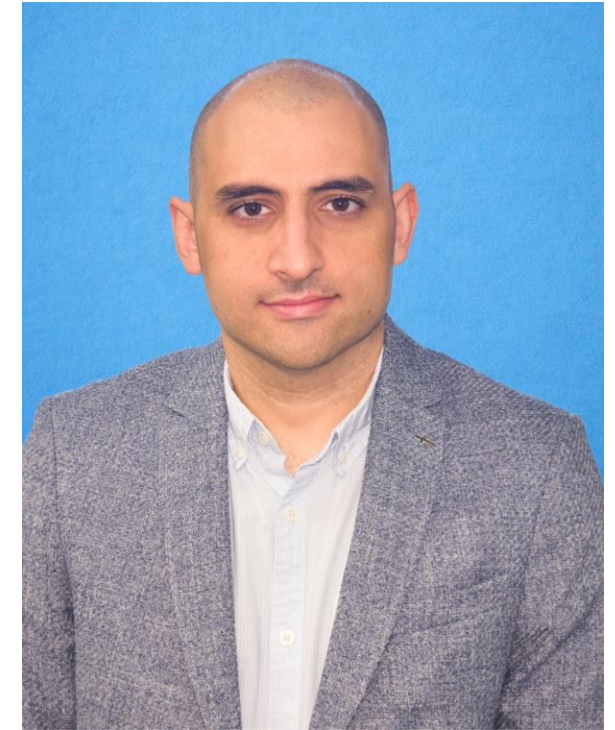
- 1) Curriculum Enhancement: We are undertaking a comprehensive revision of the digital technology courses in the Teacher Education program, ensuring alignment with the latest technological and pedagogical strategies.
- 2) Professional Development: We are providing experiential learning opportunities in which teacher candidates interact with cutting-edge technologies to foster their proficiency and confidence in integrating those into their future classrooms.

UN's Sustainable Development Goals

✓ Ensure inclusive and equitable quality education

Brock Core Competencies

✓ Act Innovatively



Dr. Mohammed Estaiteyeh

Assistant Professor of Digital
Pedagogies and Technology
Literacies

Faculty of Education

INTERNATIONAL DEVELOPMENT WEEK 2024



Brock
University

Fostering Seeds of Change in Initial Early Childhood Teacher Education (ITE-ECE) for Sustainability

This project focuses on preparing early childhood educators to teach with socially transformative pedagogical approaches, where children's capacities to be agents of change for sustainability are fostered. By understanding what specific elements of education for sustainability educators understand, perceive as important, and champion within their pedagogies, ways of embedding sustainability education within ITE will be made evident.

UN's Sustainable Development Goals

✓ Ensure inclusive and equitable quality education

Brock Core Competencies

✓ Apply Knowledge



Dr. Debra Harwood
Professor
Faculty of Education

INTERNATIONAL DEVELOPMENT WEEK 2024



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University

Science Education and Local Communities (SELC)

This project examines the socio-scientific issues, such as biodiversity, climate change mitigation, and healthy living in school communities. Working with teachers, the researcher is helping to develop project-based, interdisciplinary, and community-based science curricula in schools in relation to their local communities.

UN's Sustainable Development Goals

- ✓ Ensure inclusive and equitable quality education
- ✓ Take urgent action to combat climate change
- ✓ Protect, restore and promote sustainable use of ecosystems

Brock Core Competencies

- ✓ Engage with your community



Dr. Xavier Fazio
Professor
Faculty of Education

INTERNATIONAL DEVELOPMENT WEEK 2024



Hisabati ni Maisha (*Mathematics is Living/Life*)

The purpose of this project is to conduct a second follow up study on an international development project that was designed to build capacity for mathematics teaching and learning in rural and remote communities in Tanzania. The 5-year project (November 2012 – March 2018) was initially funded by Global Affairs Canada (GAC) and involved a Canadian Coalition – University of Alberta (Applicant) and Brock University (BU) and a local partner – University of Dodoma (UDOM). The project focused on three areas of activities: 1) Teacher Education Policy, 2) Mathematics Teacher Development including support for graduate education, 3 PhDs and 22 Masters, and 3) Community Participation.

UN's Sustainable Development Goals

- ✓ End poverty in all its forms everywhere
- ✓ Ensure inclusive and equitable quality education
- ✓ Achieve gender equality and empower all women and girls

Brock Core Competencies

- ✓ Act innovatively



Dr. Joyce Mgombelo

Associate Professor, Mathematics Education
Faculty of Education

In collaboration with:

Dr. Elaine Simmt, Professor Emeritus, University of Alberta

Dr. Florence Glanfield, Professor, University of Alberta

Dr. Calvin Swai, Lecturer, University of Dodoma, Tanzania

Dr. Andrew Binde, University of Dodoma, Tanzania

INTERNATIONAL DEVELOPMENT WEEK 2024



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Canadian Cultural Practices

My goal was to deepened students' learning in the course not only by gaining awareness of the Canadian culture, but also by contributing to this culture through educating the community about their native cultural heritage. Toward this goal, I developed the Native Cultural Awareness Project affording my students invaluable opportunities to take pride in their own cultural heritage and share it with the campus community. Two teams of my students hosted intercultural events on campus during the International Week through which they celebrated famous festivals including Diwali and engaged the campus community in deliberate fun activities that generated conversations about multiculturalism. These projects helped promote inclusive learning environments and peaceful communities through cultivating platforms of meaningful one-on-one dialogues among people from diverse backgrounds. Additionally, these projects enabled my students to make meaningful contributions to the campus while practicing invaluable 21st century skills, such as communication, leadership and teamwork.

UN's Sustainable Development Goals

- ✓ Build resilient infrastructure, promote inclusive and sustainable industrialization
- ✓ Make cities and human settlements inclusive, safe, resilient and sustainable
- ✓ Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Brock Core Competencies

- ✓ Practice intercultural fluency



Dr. Neivin M. Shalabi

Instructor

Canadian Culture in Education Studies (CCES)

6P02's Canadian Cultural Practices

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Island of Bequia

St. Vincent and the Grenadines

Over a two-year period, our team supported inclusive education efforts in St. Vincent and the Grenadines, specifically on the island of Bequia. The primary school and high school teachers, tutors, admin and parents received many hours of in-person and virtual professional development and real time support, as well as online support for resource development, technology, Transition and Individual Education Plans. Teachers, tutors, admin and parents developed capacity for best practices for including students with various learning, physical and sensory differences. Twenty-one students were identified for support and several students transitioned to inclusive classrooms for the first time.

UN's Sustainable Development Goals

- √ Ensure inclusive and equitable quality education
- √ Reduce inequality within and among countries
- √ Strengthen the means of implementation and revitalize the global partnership for sustainable development

Brock Core Competencies

- √ Collaborate effectively



Dr. Sheila Bennett
Professor Emeritus
Faculty of Education

In collaboration with:

Dr. Monique Somma, Assistant Professor, Brock
Dr. Margo Shuttleworth, Assistant Professor, Brock
Dr. John Freer, St. Clair College

INTERNATIONAL DEVELOPMENT WEEK 2024



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Teacher Professional Development St. Vincent and the Grenadines

Over a two-year period, our team supported teacher professional development in St. Vincent and the Grenadines (SVG). We adopted a train-the-trainer model in order to build capacity. In September 2021, a pilot training session was completed online due to COVID-19 travel restrictions. In April 2023, we traveled to SVG and completed 5 days of hybrid training with over 100 educators and facilitators on topics including 21st Century Skills, Growth Mindset, Differentiated Instruction, Formative Assessment and Lesson Planning. The overall goal is for these educators to take their learning back to their schools and improve education outcomes for their students.

UN's Sustainable Development Goals

- ✓ Ensure inclusive and equitable quality education
- ✓ Reduce inequality within and among countries

Brock Core Competencies

- ✓ Practice Intercultural Fluency



Dr. Camille Rutherford, Associate Professor, Brock University
Dr. Sheila Bennett, Professor Emeritus, Brock University
Dr. Tiffany Gallagher, Professor, Brock University
Dr. Monique Somma, Assistant Professor, Brock University
Dr. Keri Ewart, Lecturer, University of British Columbia
Dr. Sheliza Ibrahim, Assistant Professor, University of Toronto Mississauga
Cecila Garcia, Project Officer, Brock University

INTERNATIONAL DEVELOPMENT WEEK 2024



Co-Constructing Educational Innovations for an Uncertain Future:

Design Thinking and Developmental Evaluation in the School Reform Process

Complex issues of ecological, social and economic importance are challenging to the wellbeing of individuals and the future sustainability of our society. Children and youth need to be prepared to lead the world toward solutions for these issues. To build the necessary competencies for complex problem-solving, teachers, district and school administrators, students, parents and community members at one high school used a design thinking approach, collaborating to create an innovative, unique, project-based, experiential STEM program to meet their specific needs and goals. Developmental evaluation was regularly used to assess the program's intended impacts to enable timely modifications while the program was in progress. The project provided evidence that design thinking and developmental evaluation strategies commonly used in social innovation is also an effective approach for creating innovation school reforms that are tailored to student, school and community needs, and responsive to complex, ever-changing ecological, social and economic environments.



Dr. Catherine Hands, Brock University
Dr. Elizabeth Kurucz, University of Guelph
Nadine Gudz, M.A.
Dr. Karin Archer
Emily Krysten Spencer-Mueller, M.A.

UN's Sustainable Development Goals

- ✓ Ensure inclusive and equitable quality education
- ✓ Build resilient infrastructure, promote inclusive and sustainable innovation
- ✓ Protect, restore and promote sustainable use of terrestrial ecosystems

Brock Core Competencies

- ✓ Act innovatively
- ✓ Think critically
- ✓ Engage with your community

INTERNATIONAL DEVELOPMENT WEEK 2024

