

OVIN 2.0 Empowering Equity in STEM Pilot Program



ST. CLAIR COLLEGE
RESEARCH AND INNOVATION

**Research and Innovation Department -
Project Overview Database**

Background

St. Clair College Research and Innovation developed a STEM Summer learning program to address systemic inequities in STEM education for underrepresented groups, including women, Indigenous Peoples, persons with disabilities, racialized groups, and 2SLGBTQ+ members. The five-week camp engaged 185 students (Grades 5-12) in hands-on automobility-focused STEM activities using LEGO SPIKE Prime robots and iPads, with mentorship from industry partners. Supported by organizations like WEST of Windsor and BlackBoys Code, the program also served as a research initiative to assess its impact and inform future iterations, promoting accessibility, inclusion, and workforce development in STEM fields.

Purpose/ Approach

The OVIN STEM Robotics Program prioritized inclusivity, ensuring underrepresented and equity-deserving groups could fully engage in hands-on STEM learning through tailored activities and flexible support. Staff provided accommodations for diverse learning needs, reinforcing accessibility and continuous improvement. Additionally, the program functioned as a research initiative, collecting stakeholder feedback to assess engagement, curriculum effectiveness, and areas for improvement. These insights will guide future program enhancements, promoting sustainability and equitable STEEM education for all participants.

Deliverables

The OVIN STEM Robotics Program delivered an inclusive summer camp, a digital curriculum, and long-term STEM resources to promote equity, diversity, and accessibility. The camp provided hands-on learning experiences for underrepresented youth, while the interactive digital curriculum extended STEM education beyond the program. Additionally, all purchased materials, including iPads and LEGO SPIKE Prime robots, were donated to community organizations, ensuring continued STEM engagement and long-term impact.

AT A GLANCE

- 2 Primary Investigators, 3 Co-Investigators, and 2 Administration staff along with 12 funders and partners led the program and research components.
- 9 Summer Camp Staff led the STEM Robotics Camp focusing on EDI values.

PARTNERS

