## **CAMPUS AS A LIVING LAB**

**Overview:** The university campus becomes the site for teaching and learning about real-world sustainability solutions. Students engage with the campus grounds as a living lab to inspire projects connected to SDGs through experiential and action-oriented lenses.

Time	Instructor Activities	Learner Activities	Techniques/Equipment
30 min	Assess student knowledge of Campus as a Living Lab	Research and share findings on Campus as a Living Lab	Internet search
60-90 min	Lead or host a tour of the campus grounds	Attend tour, ask questions, make notes, brainstorm project ideas	Invite tour leader familiar with campus and sustainability
Varies	Provide formative feedback to students on their projects	Propose, create, and present on their projects	Formative feedback such as project proposals, discussion, reflections, and peer comments



**Relevance:** The campus can be a source of germane, experiential learning where students can collaborate with campus partners and propose action plans connected to sustainability. Cross-collaborating with another class—or Facilities, the Office of Sustainability, <a href="Climate+Challenge">Climate+ Challenge</a>, <a href="KPU Wild Spaces">KPU Wild Spaces</a>—can increase the stakeholder group.

**Objective:** Students complete a learner-centered and/or <u>inquiry-based</u> project connected to the campus that proposes solutions that are ecologically and socially sustainable.

**Pre-assessment:** Do students know what Campus as a Living Lab is?

**Most Relevant SDGs:** Quality education, clean water and sanitation, affordable and clean energy, climate action, and life on land. Students decide which to focus on.

**Time:** Can be adapted to a single class or span an entire semester.

**Location(s):** Campus grounds and campus buildings.

**Accessibility:** In exploring the campus, choose a route that limits obstacles to mobility. Provide learners with clear expectations for the campus tour, including if (and how) they should take notes. Have a discussion about accessibility needs and ask learners if there are places on campus they would like to explore.

## **Process:**

- 1. Have students research Campus as a Living Lab and share their findings.
- 2. Do a tour of the campus, which could be led by the Office of Sustainability or Facilities, and stop at specific sites. Possible sites include:
  - a. KPU Langley: vertical raingarden, Horticulture greenhouses, Logan Creek, parking lots built over the creek
  - b. KPU Richmond: KPU Farm, parking lot, Wilson School of Design, Lansdowne mall, SkyTrain station
  - c. KPU Surrey: parking lots, Westerman Property, main courtyard/pond, pocket forest, inner courtyard, campus garden
  - d. KPU Tech: Auto mechanics, millwright, e-car charging stations, outside west entrance
  - e. KPU Civic Plaza: Collaboration space, SkyTrain station, parking lot, living wall (Surrey City Hall)
- 3. While on the campus tour, have students notice and critically reflect on what in their surroundings may be connected to a sustainability challenge or strength. Ask them these questions developed by Alicia Gowan:
  - a. Why might we be standing here in this location?
  - b. What in our surroundings may be connected with a sustainability challenge? A sustainability challenge KPU may face?
  - c. What might be missing that would better support your needs as a student at KPU, and how might this relate to sustainability?
- 4. Students write a proposal for a project that connects one or more specific campus sites to 1-2 SDG goals. Ideally, they should collaborate or consult with an internal or external member who has expertise on their chosen topic. E.g., facilities, campus planning, or the KPU mentors listed below.
- 5. Students complete their project with regular formative feedback from their instructor, and do a final presentation.

**Accountability:** Students will present their project to the class and invite collaborators and/or community members to attend.

Adapt for your Discipline/Course: Get familiar with your campus. Walk the grounds and connect with the Office of Sustainability, facilities, Wild Spaces, or one of the KPU mentors listed below. Based on your campus walk and conversations, brainstorm ideas for potential SDG-relevant projects students can work on. Determine the most suitable campus locations to visit during the campus tour, and what questions to ask students.

If you teach Educational Studies, the campus tour might include different learning environments (standard classroom, e-classroom, science labs, outdoor sites); students explore the quality education or reduced inequalities SDGs. If you teach Horticulture, Environmental Protection Technology, or Sustainable Agriculture, the campus tour might include greenhouses, gardens, forested areas or waterways; students choose to explore zero hunger, good health, clean water, climate action or life on water/land SDGs.

Students can also consider other resources for exploring their sustainability issue, such as the Truth and Reconciliation Calls to Action, the KPU Strategic Plan/Vision

KPU Mentors: Kathy Dunster, Andrea Niosi, Monica Affleck

**Post-Assessment:** Think-pair-apply (instructor poses a question—connected to practical application—based on the campus as a living lab student presentation, in pairs students discuss this question and ideas for applying this in their own lives, then they share with the larger group ways to implement this in the real world).

**Reflection Questions:** 1. What unexpected obstacles did you face, and how did you overcome them?

- 2. How has your relationship with the university campus changed? Do you feel more or less connected?
- 3. What are the limitations and/or future considerations for your project? Are the any connections to the  $x \in \text{Pel} \setminus \text{KPU Pathway to Systemic Transformation}$ ?

## **Resources:**

<u>University of Toronto - Campus as a Living Lab</u>

The University Campus as a Living Lab for Sustainability: A Practitioner's Guide and Handbook

KPU2050 Campus Plan