2025/26 Limestone Skills Competition
Elementary GREEN INDUSTRIES SCOPE

An argument for Green Industries at the elementary level

Although an official elementary green industries course has not been published (as of 2025/26), there is a strong directive from elementary curriculum documents to incorporate environmental education within all curricula (Ontario Curriculum: Environmental Education Scope and Sequence of Curriculum 2017). The nature of these cross-curricular expectations includes a rich knowledge base, critical thinking, and application of industry-related skills in meaningful contexts. An Ontario Skills event focusing on green technology design will draw together these three key components.

The Challenge - A pre-event project, and a Skills Competition Day Challenge

Much like a science fair project, this tier of the event will enable students to showcase learning that incorporates the design process, scientific thinking, and research into innovations addressing community needs, specifically through environmental design and civil engineering.

Part 1
This green industry event will challenge students to evaluate the needs of a community and apply sustainable design principles to address these needs. Once registered, each team will receive a location for evaluation. For example, the team might be presented with a decommissioned school sitting unused within a community that has housing, food security, childcare and transportation needs. In the weeks leading up to the Limestone Skills Competition, teams will prepare a scaled physical model and/or digital model and a digital presentation of their design plans for this site.

The team will
a) Research and identify needs within the community
b) Apply principles of sustainable design and green infrastructure to improve the human and natural habitat on this site. For example, a team's research into its site might reveal the need for greater access to affordable food and activities for youth. They might then ask themselves, “How could our site be re-designed to improve food security and provide after-school opportunities for local youth?” Their model would include improvements that would address these needs.

On the day of the Skills Competition, each team will have ten minutes to present their project.

The Skills Competition Day Challenge

On the day of the Skills event, these teams will participate in an active challenge that will test their design and problem-solving skills. Reflecting a more traditional Skills competition event, students will tackle a case study that challenges them to redesign an underutilized space in the Kingston area so that it better serves community members and improves both the human and natural environment. Teams should be familiar with sustainable solutions, such as permaculture design, local food systems, renewable energy, climate change scenarios/solutions, affordable housing solutions, transportation alternatives to cars, and community planning issues that reflect and address the intersection of environmental and social needs.

Teams will receive:
A Google Earth photo of a community
A profile of the socio-economics of that neighbourhood
A list of needs faced by community members
A description of abandoned buildings or lots
Craft materials for building a diorama
Art materials for presentation
WiFi access for digital tools such as Google Slides

Teams will bring:
School or Personal Chromebooks
A hot glue gun
Additional art materials
Long-term projects

Schedule:
8:30 - 9:00 - registration and set up of projects for gallery walk
9:00 - 9:10 - Welcome and description of the collaborative philosophy of the event
9:10 - 10:10 - Teams share a ten-minute presentation of their long-term projects
10:00 - 10:10 - Snack and washroom break
10:00 - 12:00 - Case Study Challenge begins
12:00 - 12:30 - Lunch break
12:30 - 1:30 - Presentation finalization
1:30 - 3:00 - Teams present their solutions to judges and each other.
3:30 - 4:00 - AWARDS in gym