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Floragenesis


Ian Schneier
Worcester Polytechnic Institute

Rachel Payne
Worcester Polytechnic Institute

Duong Nguyen
Worcester Polytechnic Institute

Liam Goodale
Worcester Polytechnic Institute

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Floragenesis: Community Garden Initiative

Ian Schneier (ECE), Rachel Payne (BME), Duong Nguyen (RBE), Liam Goodale (BBT)
 Advisors: Professor Geoff Pfeifer (HUA) and Professor Marja Bakermans (BBT)



Abstract

Floragenesis addressed food issues on campus, such as freshness and localness, with the proposal of a campus community garden that utilizes food waste otherwise neglected. Over time, the composting aspect of the program would phase out the practice of exporting food waste from the main dining halls. Composting feasibility studies specific to the WPI have been conducted in the past. For this reason, Floragenesis has primarily focused on construction, productivity, and community garden management.

The Problem

WPI claims in their sustainability report that they divert 100% of food waste from landfills which is accomplished partially by donating dining hall waste to Tyde Brooks farm, which receives approximately 550 pounds of waste per day (E. Tomaszewski). This is not "sustainable;" this is just transferring the problem of food waste to a third party for one-time use. In addition, the food waste outside the main dining areas is sent to an incinerator, polluting the atmosphere. The team proposes an alternative by decomposing the organic waste and mixing it into plant soil, ensuring that nutrients reach full potential.

Figure 2: How many hours per week would you participate in gardening activities?

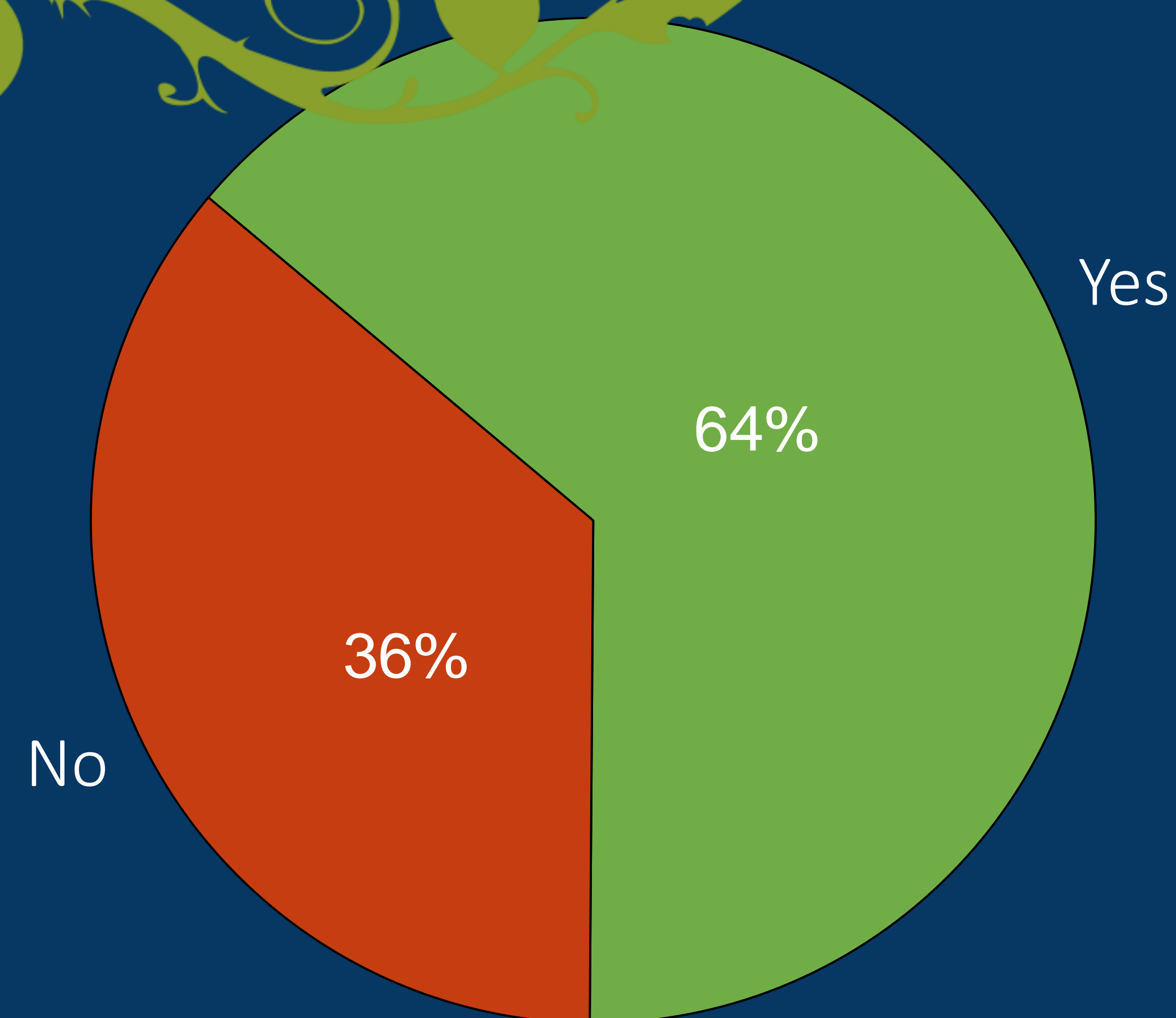
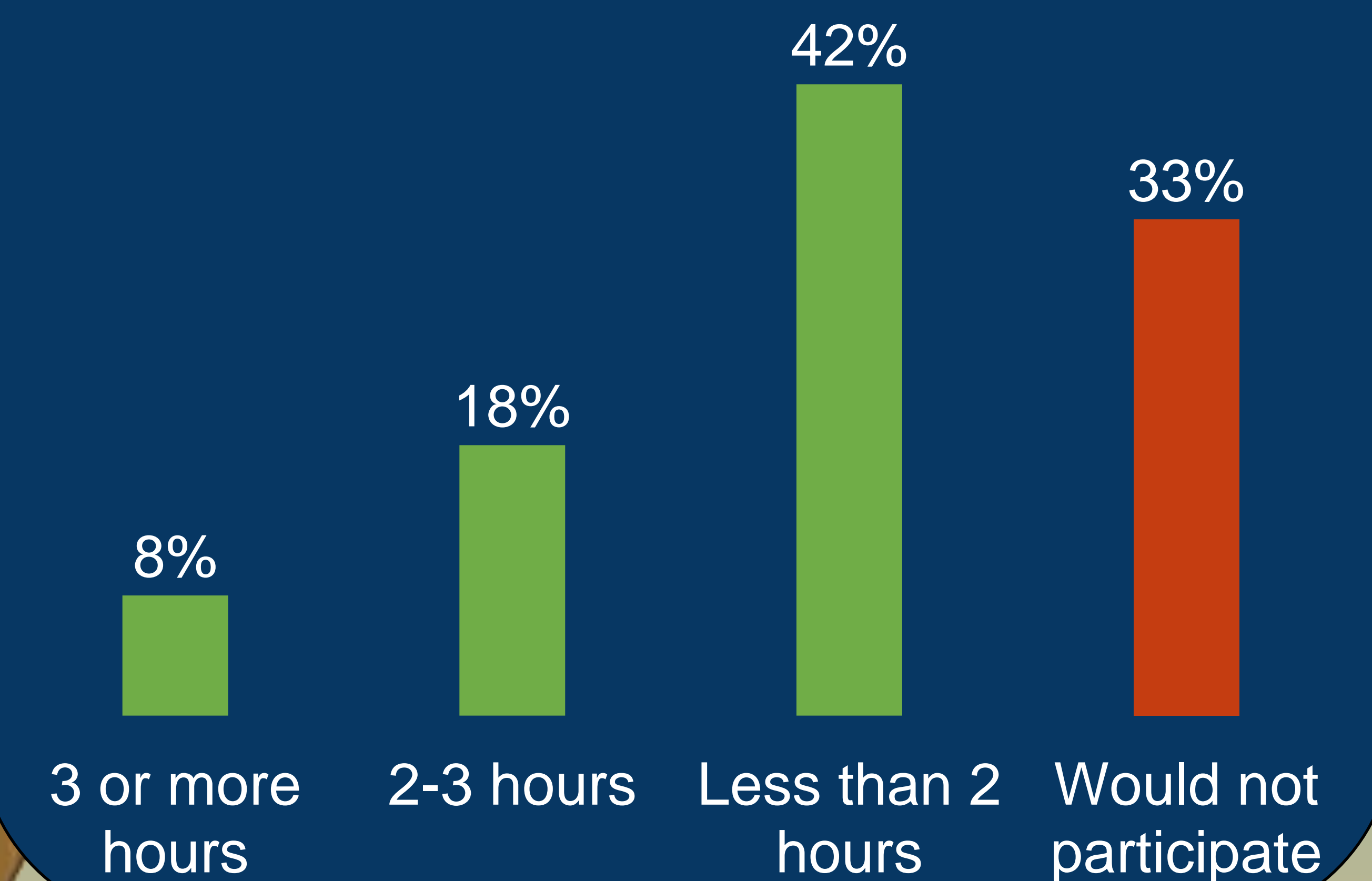


Figure 1: Online voluntary survey of 212 WPI undergraduates, asked: Would you participate in an on-campus community garden?

Solution

Raise awareness about the need for a community garden

Establish a community garden with help from WPI facilities

Run a composting program in the dining hall through Chartwells

Divest from nitrogen-based fertilizers using humus from compost



Methods

- Conducted student survey, determined the location of compost collection bins
- Emulated community garden plans and compost system plans of other universities
- Established management plan

Implementation

- Facility department collaboration
- Arrange for a work-study program, club or IQP projects in the community garden
- Work with Chartwells to finalize the composting program

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