

WPI

Project Happy Cow

Understanding Meat Consumption on WPI Campus

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Problem

Animal agriculture is a major contributor to climate change, especially in terms of greenhouse gas emissions. Reducing meat consumption can provide significant health and environmental benefits.

"Livestock and their byproducts account for at least **32,000 million tons** of carbon dioxide (CO2) per year, or **51%** of all worldwide greenhouse gas emissions" (Hyner, 2015)

Methods

1. Research how meat consumption contributes to GHG emissions
2. Survey WPI students and collect data on meat consumption on campus
3. Research ways to educate students on the environmental impact of a meat-based diet
4. Suggest a general solution to be implemented on college campuses

References

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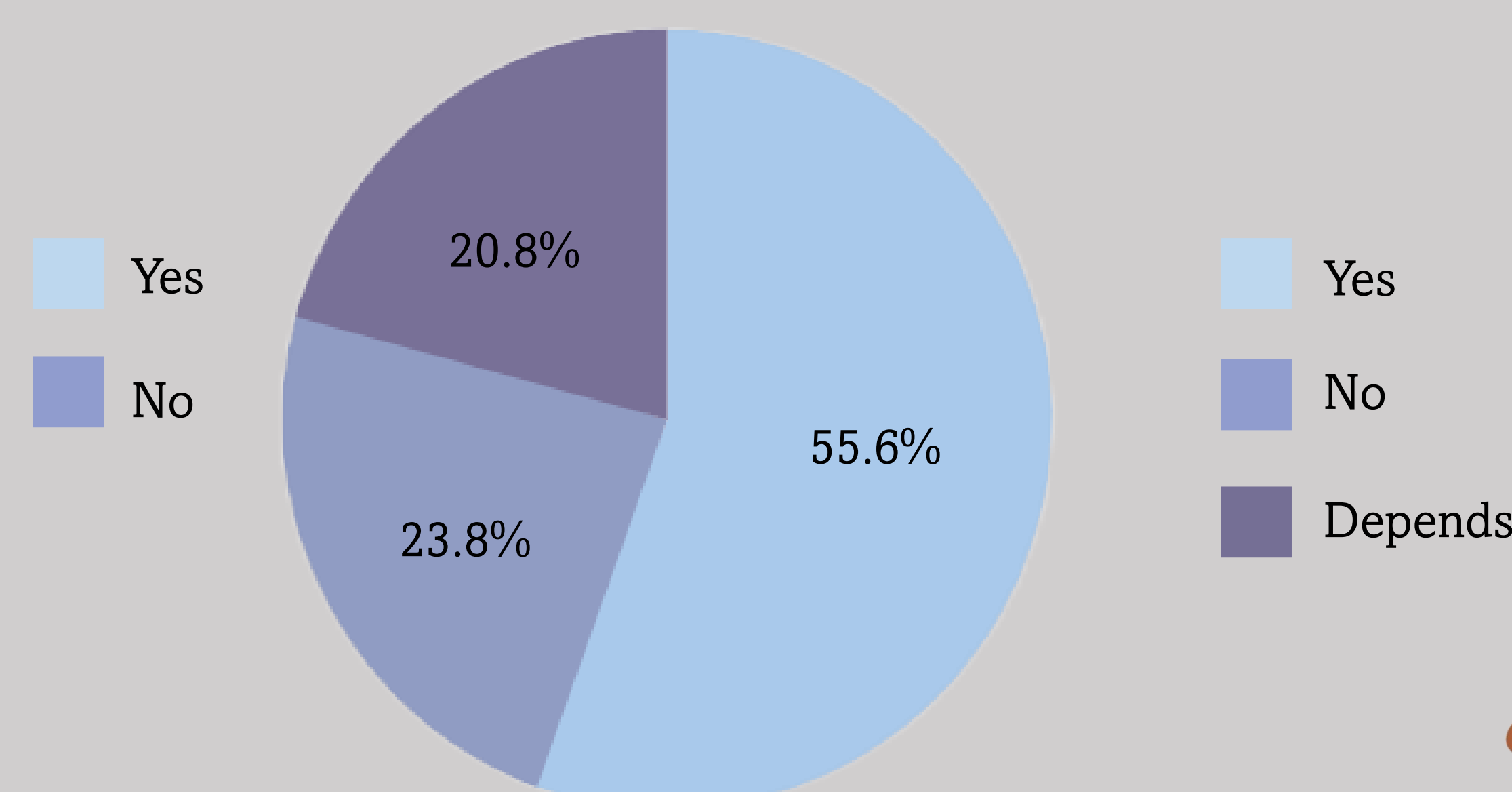
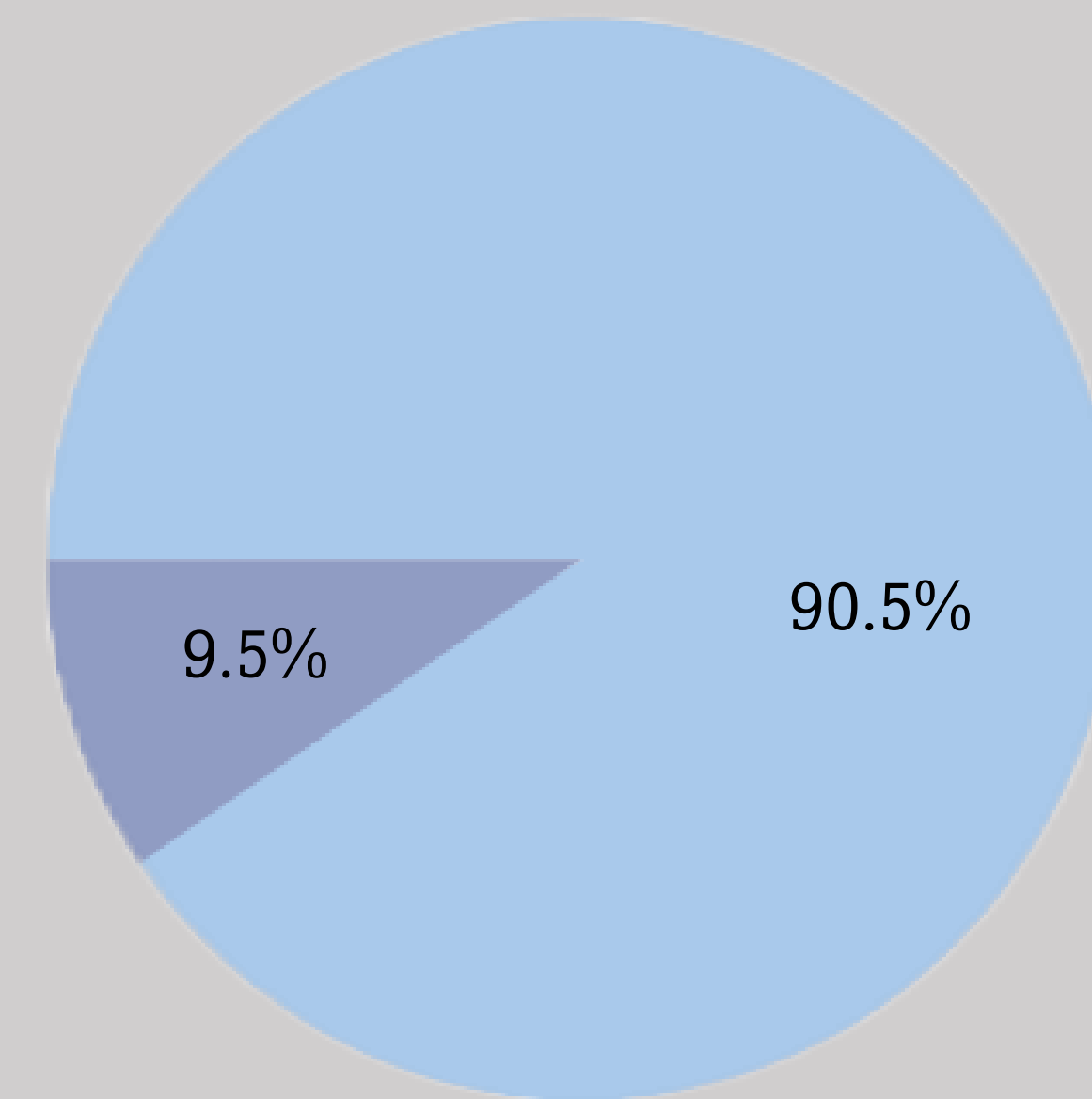
Objective

Research and understand the **environmental impact of meat production** and create an **education method for college students** to reduce meat consumption, general enough to be implemented on other campuses.

A survey was conducted to understand the dietary patterns and mindset on environmental issues of the students on the WPI campus.

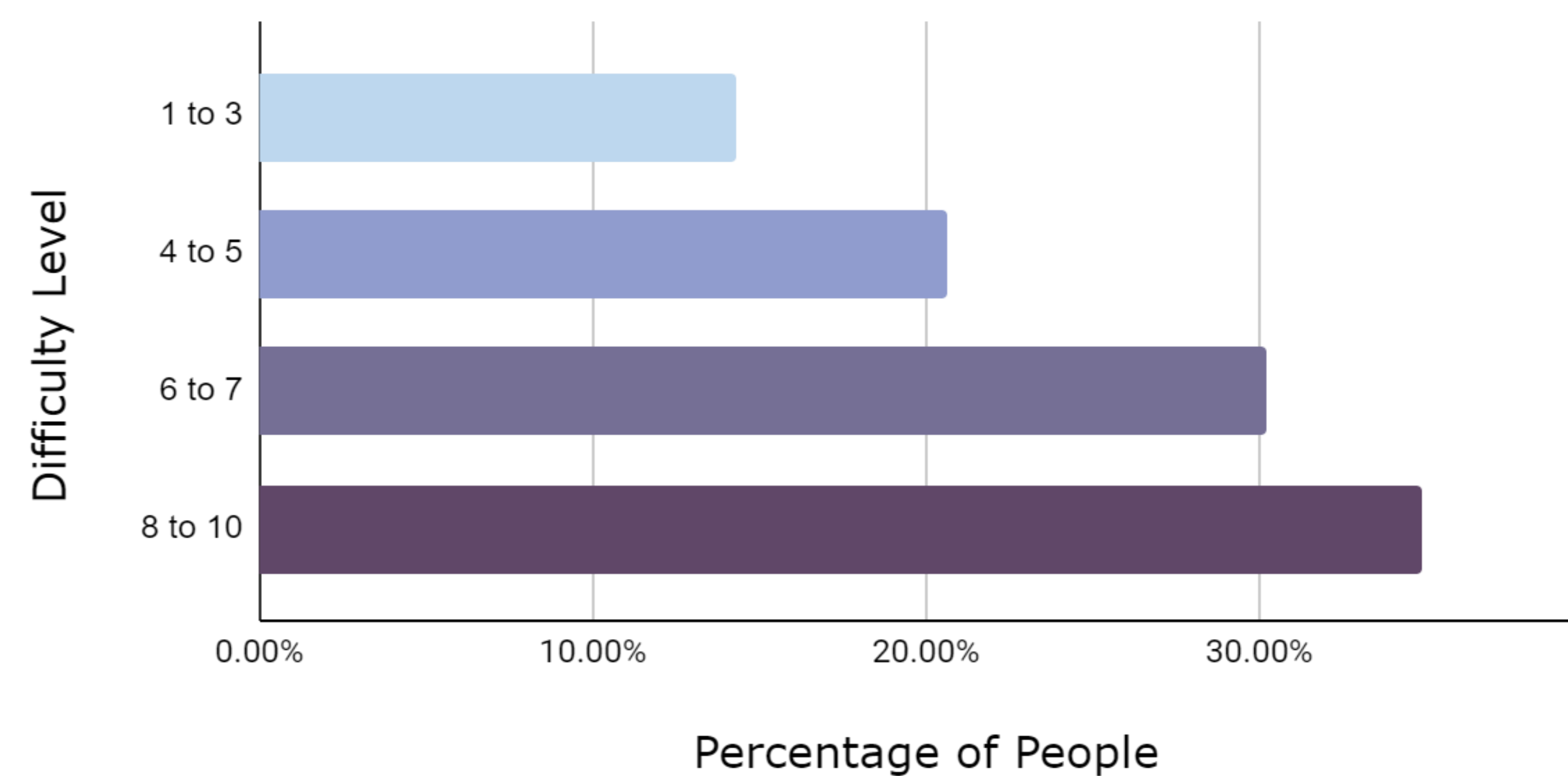
Would you be willing to make lifestyle changes if you knew they had a positive impact on the environment?

Would you be willing to make dietary changes if you knew they were benefitting the environment?



Over **90%** of students would be willing to make lifestyle changes because of their environmental impact, but only **55%** of students would be willing to make dietary changes to benefit the environment.

On a scale from 1-10, how difficult would altering your diet be?



The majority of WPI students would find it difficult or extremely difficult to alter their diet.

Survey results show that WPI students have an idea of how the meat industry contributes to climate change but are unsure how to alter their diets. Students need better education on plant-based alternatives and how to access them.

Effective Education

Engaging activities (Monroe et. al 2019) ex. debates, group discussions, hands-on labs, and field trips

- Sampling meat alternatives
- Showing of educational films
- Q&A with an expert panel
- Visit lab of cell cultured meats

Case Study

The **One Meal a Day** approach is a great way to reduce consumption of animal products.

- The K-12 environmentally focused Muse School implemented an entirely plant-based lunch program
- 18-month long program to educate parents and students on the importance of eating plant-based
- Speaker series, documentary showings, plant-based food tastings, and discussions about the change (Winfrey 2019)



☆The Muse School

A **shining star** example of **effective education**.