

A watercolor illustration of the Earth, showing blue oceans, green continents, and white clouds, set against a light grey and white background.

Environmental Concern: Controlling the Issue in our School Community

By: Abigail H., Ava F, Wuilder P., Jordan T.

Date: 04-26-2023





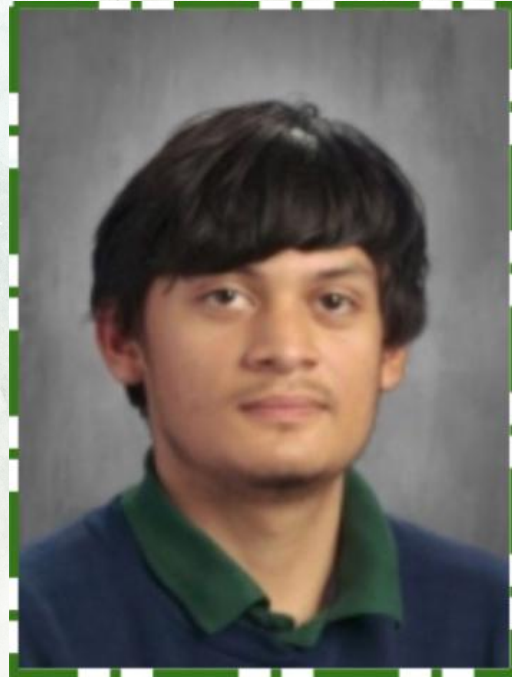
Abigail S. Halliday



Jordan D. Towler



Ava T. Fleming



Wuilder A. Palles Vasquez

Research Question

What are PAAAS student perceptions on environmental-friendly practices at their school?

Interest in topic

We noticed a pattern of discarded items not being put in their designated bins and mixed together into one bin. We also noticed that some classrooms and even the cafeteria did not have any recycling bins. When introduced to YPAR, we agreed it would be a great idea to address this issue and reach a wider audience.

Research Process

1. Select topic
2. Issue survey
3. Collect + Analyze survey data
4. Visit all classrooms/rooms (Inventory Sheet)
5. Interview school custodian
6. Gather national research + statistics
7. Action plan

Research Design

Interview date: 03/16/2023

**YPAR: Environmental Concern: Controlling the issue in our community-
Interview**

Interviewer: Wuilder A. Palles Vasquez (PAAAS Student)
Interviewee: Mr. Brown (PAAAS Custodian)

W.P: "How important do you feel it is to recycle?"

M.B: "In my own perspective, yes I believe it is important to recycle."

W.P: "Does this school recycle all of the recyclable items that are collected at the end of the school day?"

M.B: "No. We're not required. Mostly everything that comes throughout the cafeteria that we can control like cardboard, cans, and bottles. But throughout the building we all have to work together in order to recycle because if they're throwing commingles in garbage that I throw out, it's not sanitary for us to dig through it and it's time consuming. We don't do it throughout the whole school because we don't do it as a school."

W.P: "Do you recycle at home?"

M.B: "Yes."

W.P: "Do you recycle in public?"

M.B: "Yes."

W.P: "How much recyclable waste do you feel is wasted in this school?"

M.B: "I'd have to say probably more than half. We don't know if it can be done because if you're commingling or separating bottles, cans, and cardboard that's great but that's just half of it. You get more garbage from the food waste, that's basically mixed with your lunch tray. So all of that, it's like you need to scrap your food in a separate thing because that can be put back into the earth and create a rich soil that we can learn how to grow. So I think that 50%?...It can be done better."

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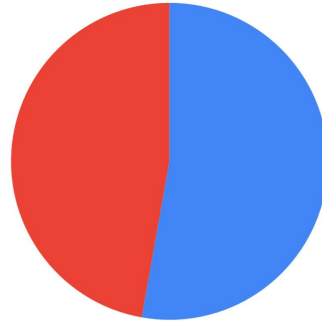
Research Design (continued)

Data collection date: 02/16/2023

YPAR 2023: Environmental Concern: Controlling the issue in our community

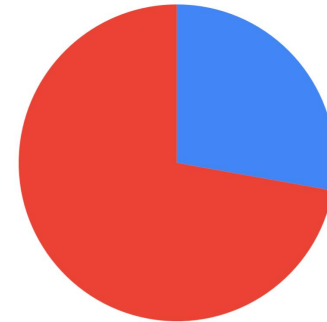
Classroom #	Does have a recycling bin	Does not have a recycling bin	Recycling bin is being used	Recycling bin is not being used
Cafeteria		✓		✓
145	✓			✓
144	✓		✓	
143		✓		✓
137		✓		✓
134		✓		✓
135	✓		✓	✓
133	✓		✓	
132	✓			✓
131		✓		✓
152	✓		✓	✓
150	✓		✓	
148		✓		✓
128		✓		✓
124		✓		✓
122	✓		✓	
120	✓		✓	
118	✓		✓	
114	✓		✓	

Do our classrooms/rooms have a recycling bin?



● classroom does have a bin: 19 (52.8%)
● Classroom does not have a bin: 17 (47.2%)

Are the recycling bins being used?



● Recycling bin is being used: 10 (27.8%)
● Recycling bin is not being used: 26 (72.2%)

Total number of classrooms/rooms examined= 36

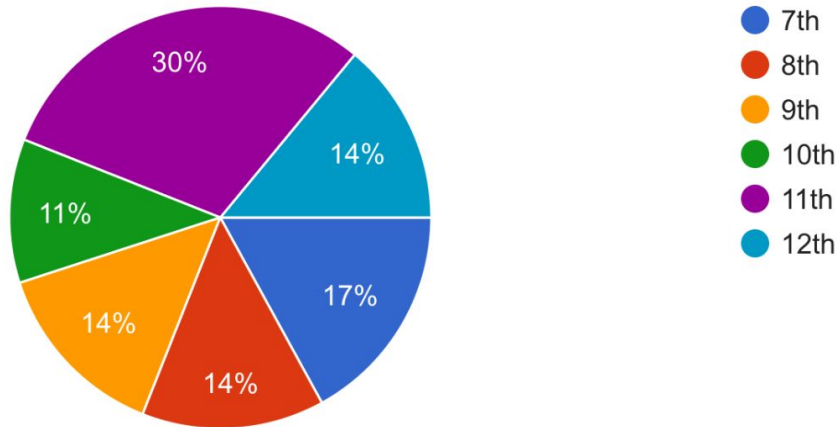
Survey Questions

1. Do you recycle?
2. Do your parents recycle/teach you how to recycle?
3. Do you think recycling is important?
4. Do you use the recycling bins at school?
5. Do you even notice the recycling bins in your classrooms?
6. Do you litter?
7. If you went out for a walk in the park and found an empty bottle on the ground, would you pick it up and throw it in the nearest recycling bin?
8. From a scale through 1-5 how much do you care about the environment?

Participant Demographics:

What grade are you in?

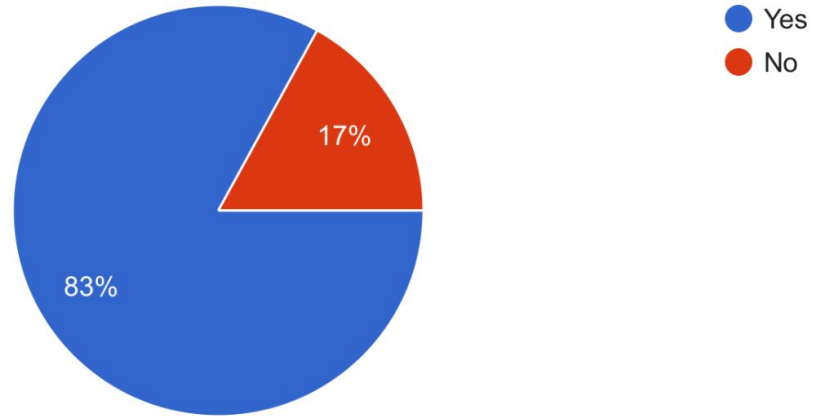
100 responses



Survey Results:

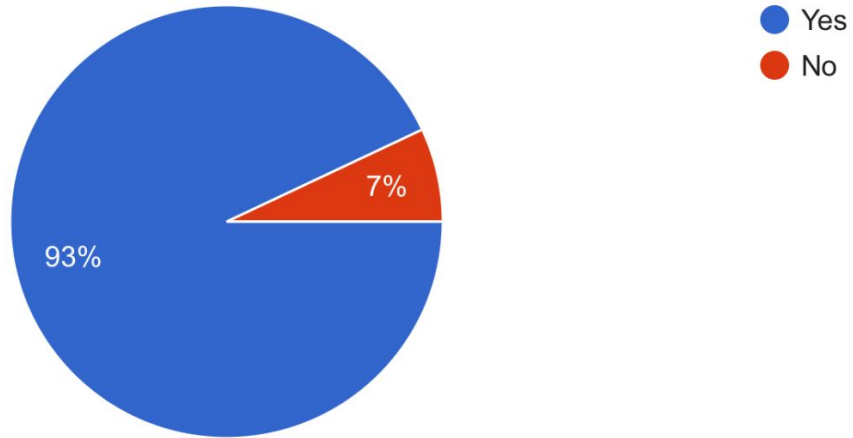
Do you recycle?

100 responses



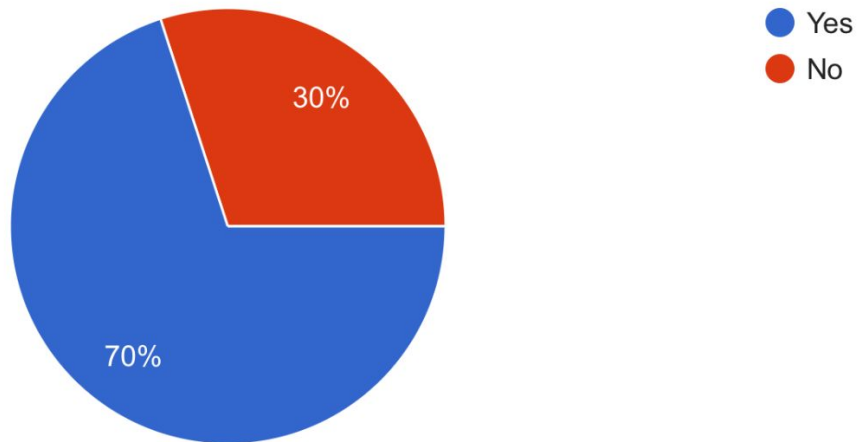
Do you think recycling is important?

100 responses



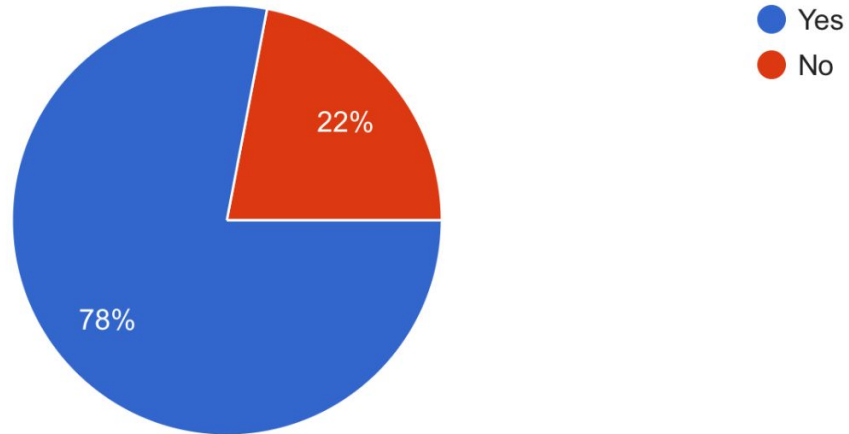
Do you use the recycling bins at school?

100 responses



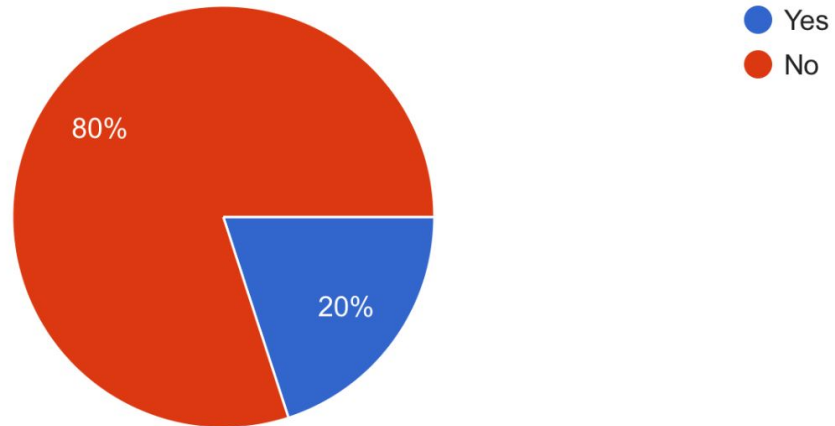
Do you even notice the recycling bins in your classrooms?

100 responses



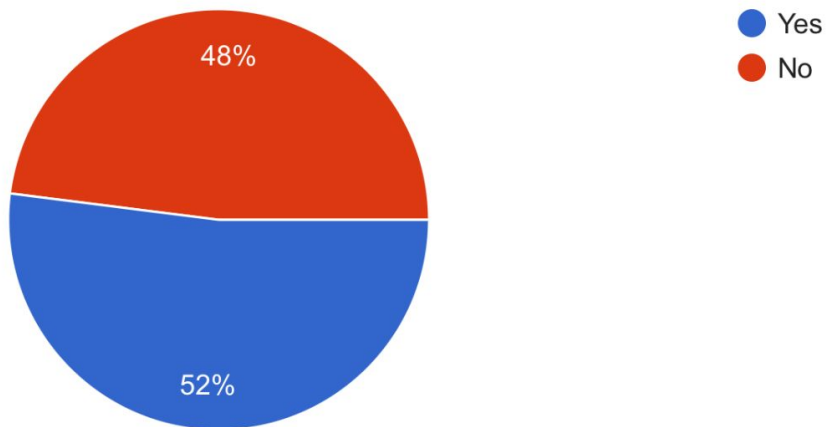
Do you litter?

100 responses



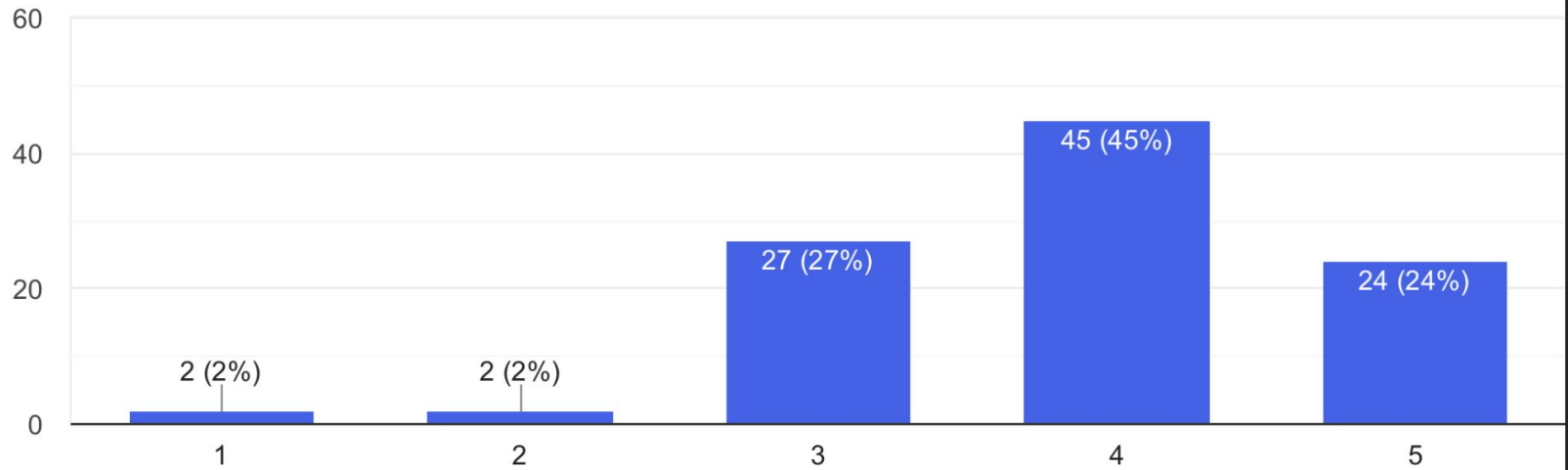
If you went out for a walk in the park and found an empty bottle on the ground, would you pick it up and throw it in the nearest recycling bin?

100 responses



From a scale through 1-5 how much do you care about the environment?

100 responses



National Research + Statistics

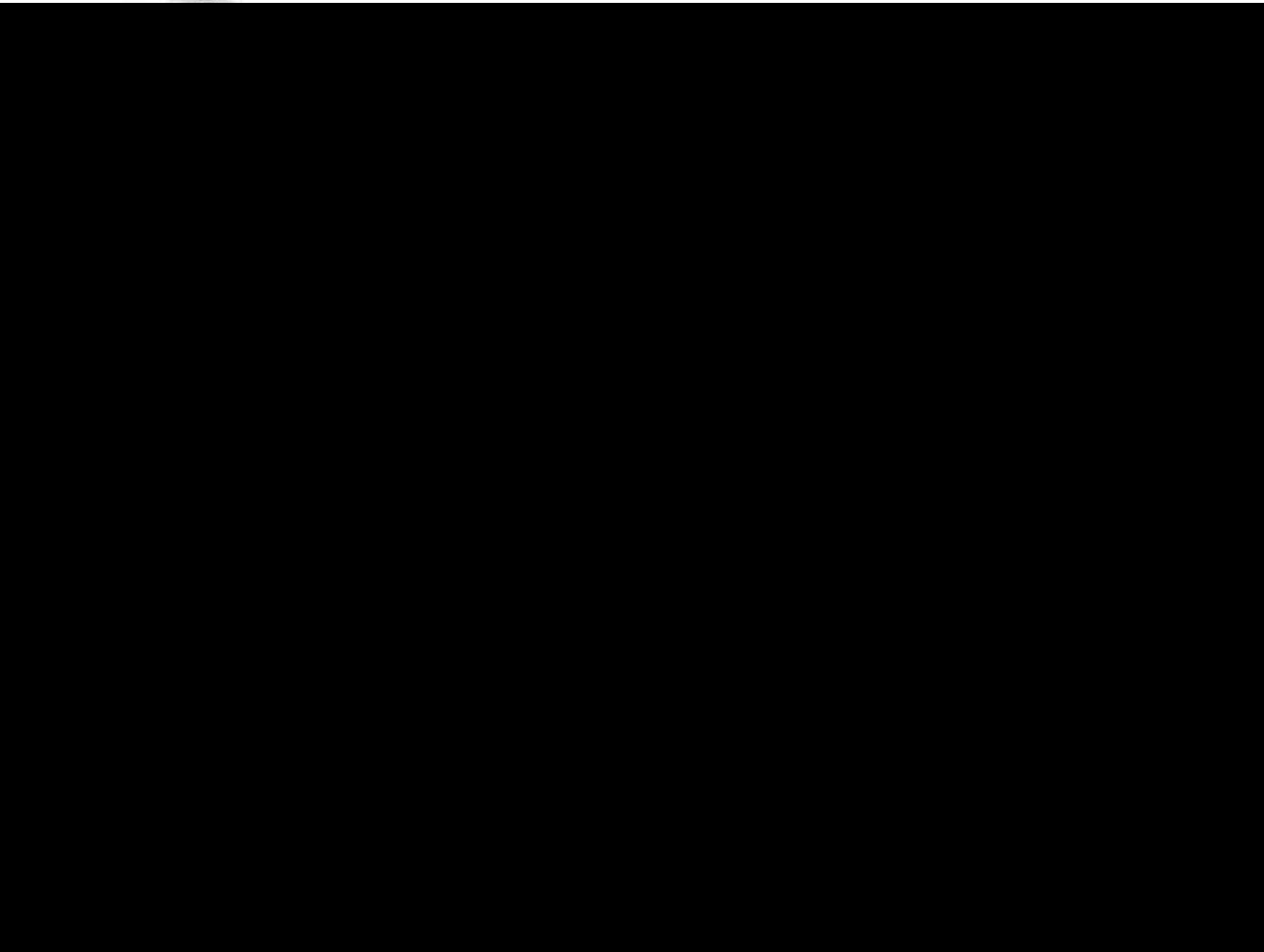
- Article: *Why Is It So Hard To Recycle?*
 - “The U.S. doesn’t have a federal recycling program and instead leaves it up to individual communities to make their own decisions and run their own programs.”
 - “Research has found that 94% of Americans support recycling and 74% say it should be a top priority. But only about 35% of people actually recycle.”
 - “The top reason Americans say they don’t recycle regularly is a lack of convenient access.”
- Article: *Recycling in the U.S Is Broken. How Do We Fix It?*
 - “According to the EPA, of the 267.8 million tons of municipal solid waste generated by Americans in 2017, only 94.2 million tons were recycled or composted.”
 - “Plastic recycling presents the biggest challenge because the plastic is often contaminated by other materials.”

National Research + Statistics (cont.)

- Article: *All the U.S Recycling Facts You Need To Know*
 - “Of the major countries that track recycling data, the United States is ranked number 25 out of 32.”
- Article: *Frequently Asked Questions: Benefits of Recycling*
 - “One ton of recycled aluminum saves 14,000 kilowatt hours (Kwh) of energy and 10 cubic yards of landfill space.”
 - “One ton of recycled newsprint saves 601 Kwh of energy and 4.6 cubic yards of landfill space.”
 - “One ton of recycled office paper saves 4,100 Kwh of energy and 3.3 cubic yards of landfill space.”
 - “One ton of recycled plastic saves 5,774 Kwh of energy and 30 cubic yards of landfill space.”
 - “One ton of recycled steel saves 642 Kwh of energy and 4 cubic yards of landfill space.”
 - “One ton of recycled glass saves 42 Kwh of energy and 2 cubic yards of landfill space.”

Limitations of Research

- Monolingual Study
- School Based vs. District wide
- Time Frame
- Participants: (surveyed students only: include Teachers, Admin, Counselors)



A watercolor illustration of a wind farm. The scene is set at sunset or sunrise, with a vibrant sky in shades of orange, yellow, and blue. Several wind turbines are visible, with the most prominent one in the foreground on the left. The ground is depicted with green and yellow washes, suggesting grass and fields. The overall style is soft and artistic.

Action Plan

- Create a PSA for PNN (PAAAS News Network)
- Create informational section/PSA for PAAAS Post (school newspaper)
- Host an assembly informing all students about the significance of recycling
- Used inventory sheet to create a list of which classrooms need recycling bins



Resources:

1. <https://www.forbes.com/sites/blakemorgan/2021/04/21/why-is-it-so-hard-to-recycle/?sh=3b884c653b77>
1. <https://news.climate.columbia.edu/2020/03/13/fix-recycling-america/>
1. <https://www.dumpsters.com/blog/us-recycling-statistics>
1. <https://lbre.stanford.edu/pssistanford-recycling/frequently-asked-questions/frequently-asked-questions-benefits-recycling>
1. Survey link:
https://docs.google.com/forms/d/1cthjvNBxAb2vz4rfiNuoeVFK91mZGp1Kfz-CrLQ_8ns/edit