



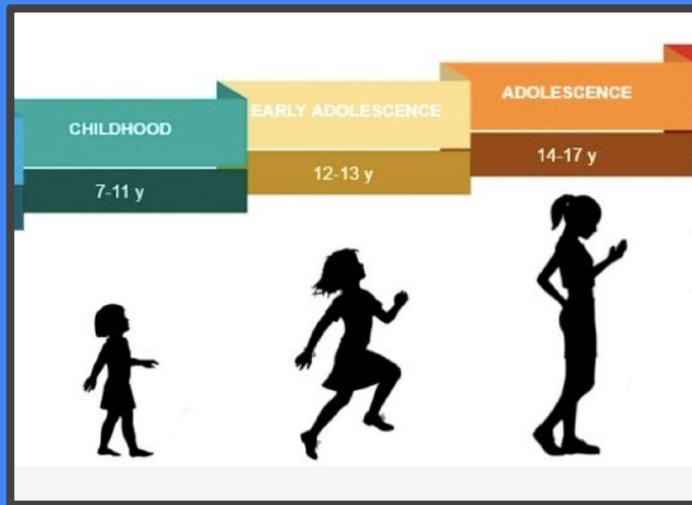
Reading-Fleming Intermediate School

Who the Huskies are
and
How they Experience RFIS

Dr. Anthony DeMarco -Principal
Mr. Jason Borawski -Vice Principal
Mrs. Vanessa Ahmed -Vice Principal

April 25, 2024

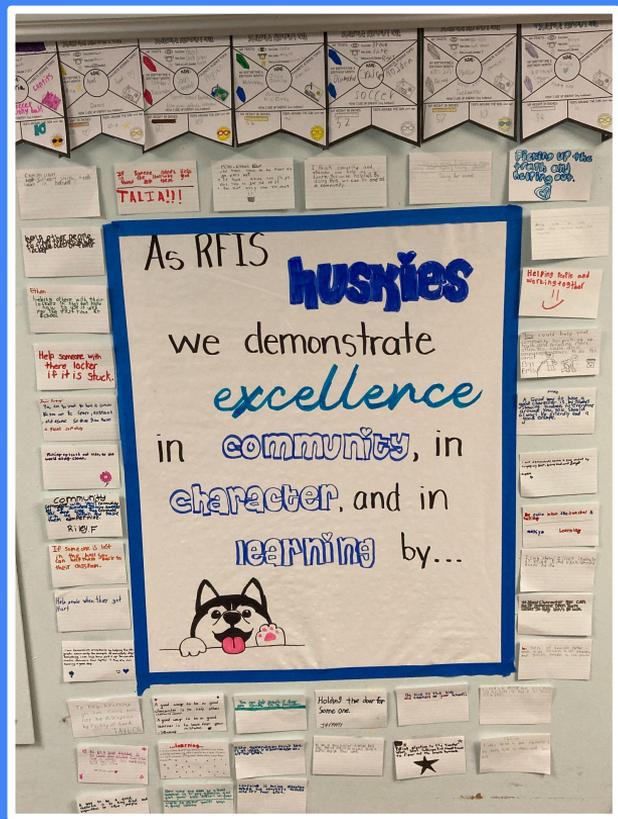
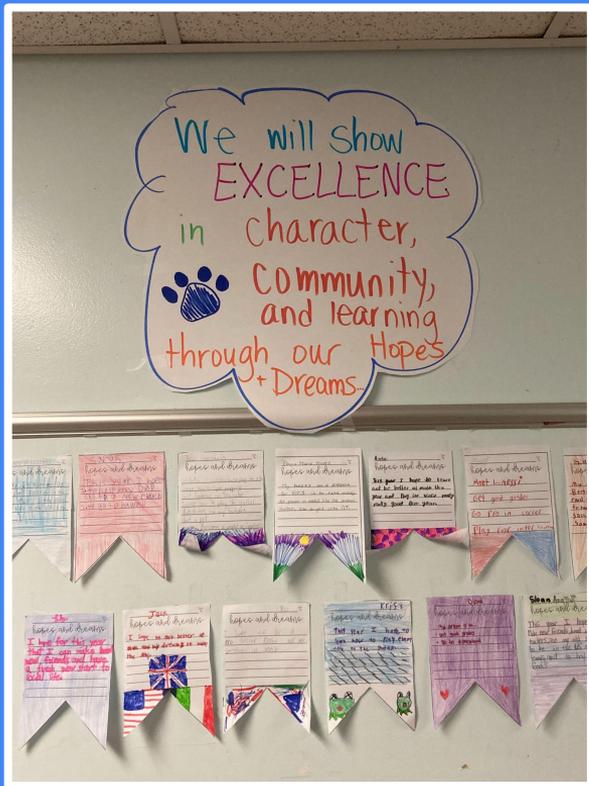
The Bridge Between Childhood and Adolescence



Panuccio, A., Biondo, D., Picerni, E., Genovesi, B., & Laricchiuta, D. (2022). Trauma-Related Internalizing and Externalizing Behaviors in Adolescence: A Bridge between Psychoanalysis and Neuroscience. *Adolescents*, 2(4), 413-423. <https://doi.org/10.3390/adolescents2040032>



Our Theme: Excellence in Community, Character, and Learning





The Huskies' House

Home RFIS Music FRSD Art RFIS Tech Healthy Husky Mindful Husky Student Links Fun Page! C

RFIS MISSION

EXCELLENCE IN COMMUNITY  EXCELLENCE IN CHARACTER  EXCELLENCE IN LEARNING

SEL-In Control

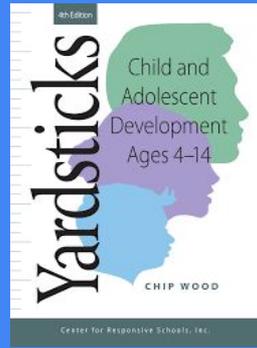
Morning Announcements 

Digital Passport 



5th and 6th Graders... Who are they?

Social and Emotional Growth Patterns



10 Year Olds

- Quick to anger and quick to forgive
- Like to work in groups (clubs, activities, teams)
- Usually truthful
- Highly sensitive, but also able to resolve questions of fairness and other social issues

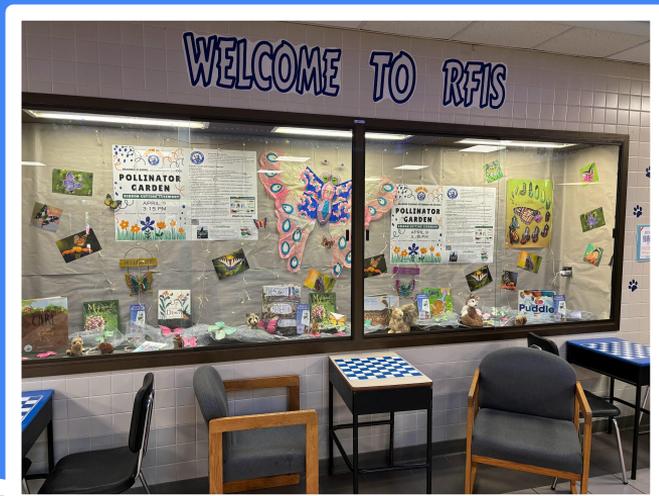
11 Year Olds

- Like to challenge rules, argue, test limits, may be cruel, sometimes physically aggressive
- Needs time with peers. Want phones, texting, social media
- Impulsive, have trouble making decisions

12 Year Olds

- Peer opinion matters more than adults
- Can take on major responsibilities but will be careless with “unimportant” things
- Growth Spurts
- Need rituals and celebrations

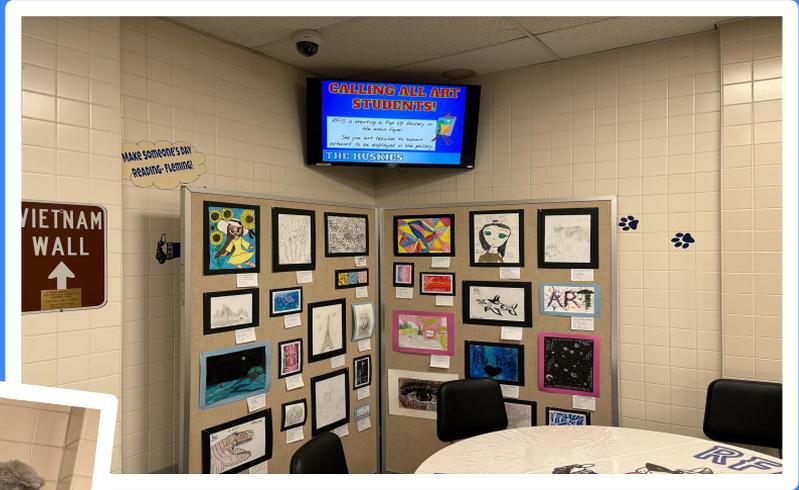
Excellence in Community



Excellence in Community



Excellence in Community



Excellence in Community



Excellence in Community



Excellence in Community



Excellence in Community



Excellence in Community

The RFIS PTO



Book Fair

Activity Nights



Variety Show



6th Grade Trip

Excellence in Community

The RFIS PTO



Staff Appreciation



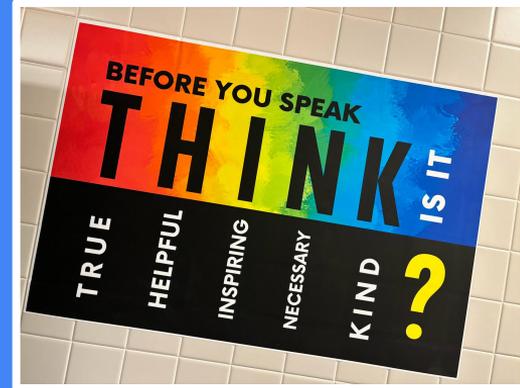
The RFIS Sensory Room

Excellence in Character

Make someone's day, Reading Fleming!



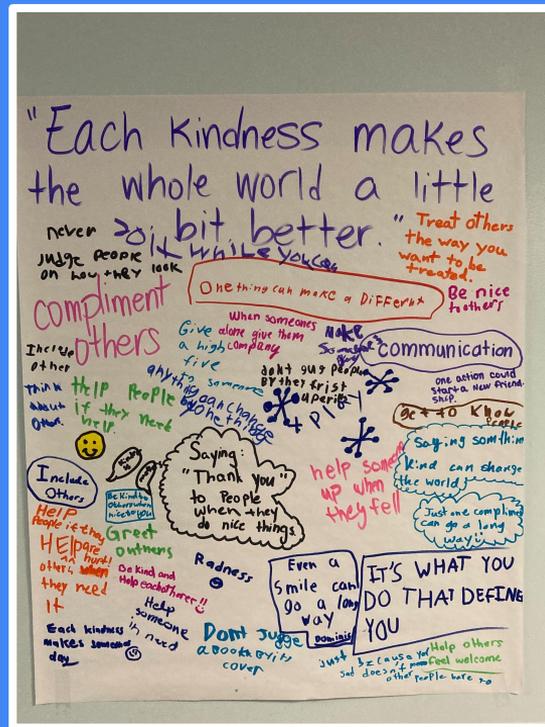
Excellence in Character



Excellence in Character



Excellence in Character



A Kid Kind of Mind

Created by: Sophia Angle & Sydney Chacko



5th and 6th Graders... Who are they?

Learning in the Classroom



10 Year Olds

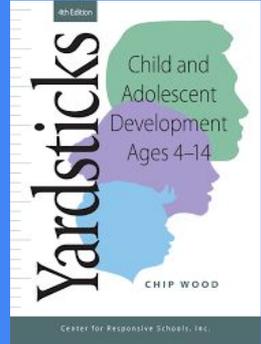
- Enjoy group activities and collaborative learning
- Good age for peer mediation and conflict resolution
- Enjoy being rewarded
- Quick tempers lead to outbursts and tears, but usually easily resolved

11 Year Olds

- Testing limits is a milestone not an attack on the teacher
- Changing groups can help with inclusion/exclusion issues
- Saving face is important and they like teachers with a “light” attitude

12 Year Olds

- May begin to excel at a subject or skill
- Understands and enjoys sarcasm, double meanings, and sophisticated jokes
- Rather learn a new skill than improve on previous work
- Interested in civics, history, current events, environmental issues, and justice
- Likes school work they see as purposeful: science experiments, drama productions, research



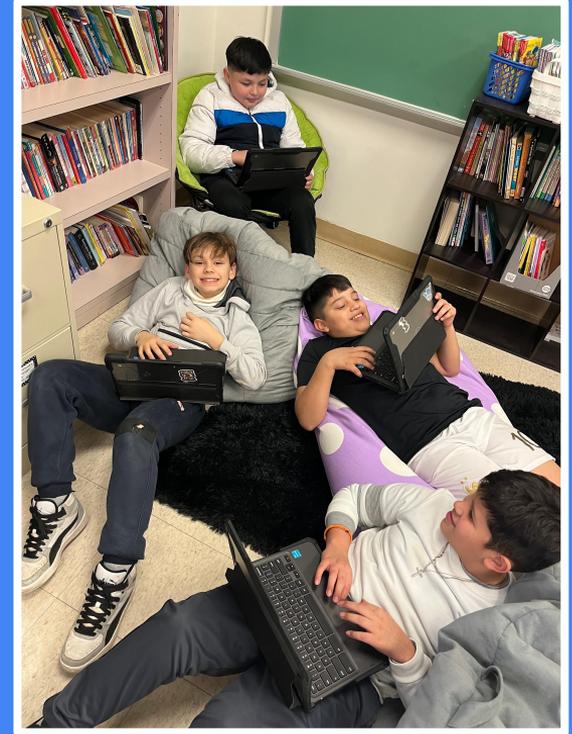
Excellence in Learning



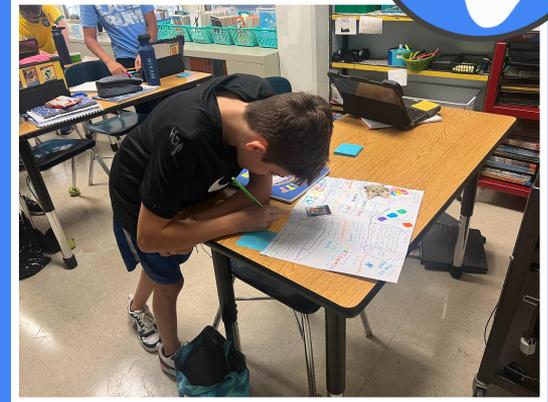
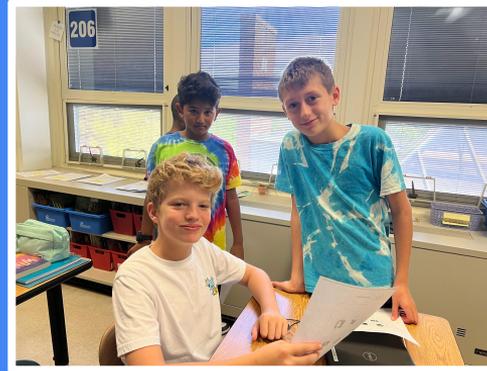
Excellence in Learning



Excellence in Learning



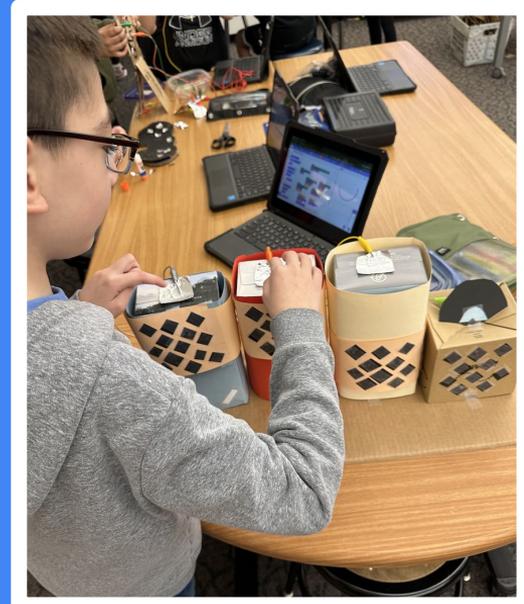
Excellence in Learning



Excellence in Learning



Excellence in Learning



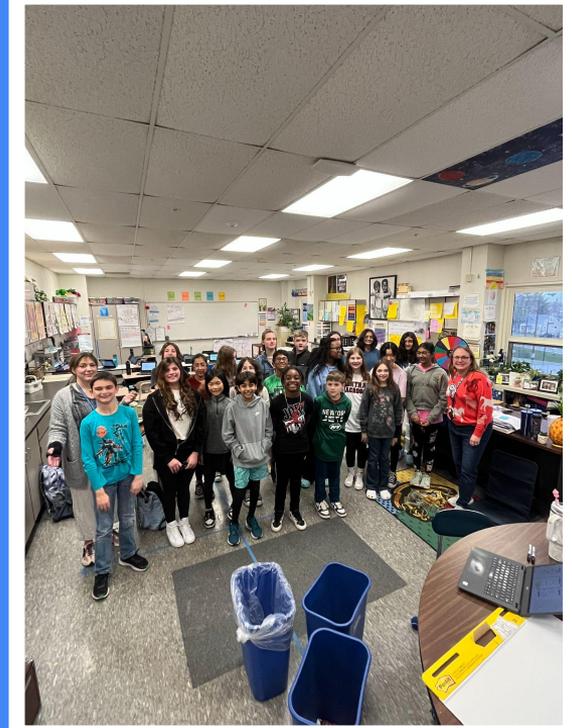
Excellence in Learning

Music Program

- Band
- Chorus
- Orchestra



Excellence in Learning



Excellence in Learning



Solar Eclipse 2024

Excellence in Learning



Morales Park Trip



Samuel Fleming House Trip



RFIS Sustainability and Stewardship

Mrs. Lisa Coster
Charlotte Whitley
Connie Huang





Before



After





After



Pollinator Garden



Scouts helping in the Pollinator Garden

Middle and High School students and parents

- Spreading bark chips
- Digging post holes
- David Berger building 16 bluebird houses



Garbage Clean Up from Watershed



Over 2 years of collecting plastic caps and lids headed up by the Student Council.



**Turning
trash into
Benches**

We Did It! Thank you to everyone who saved plastic caps and lids.

We now have 11 new benches:
7 outdoor classroom, 4 for walking
path and basketball courts

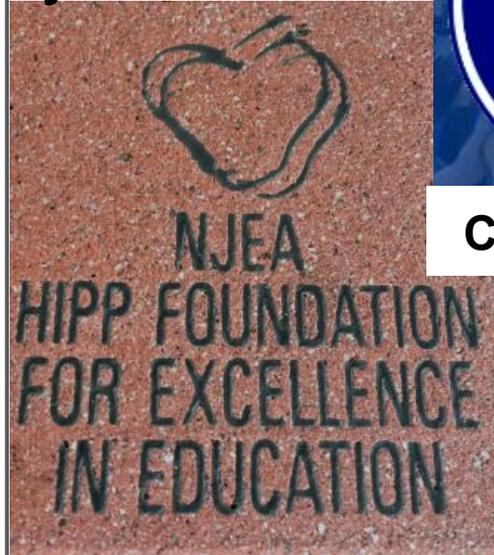


Start your at-home collection today
so we can make more benches for
around our walking path

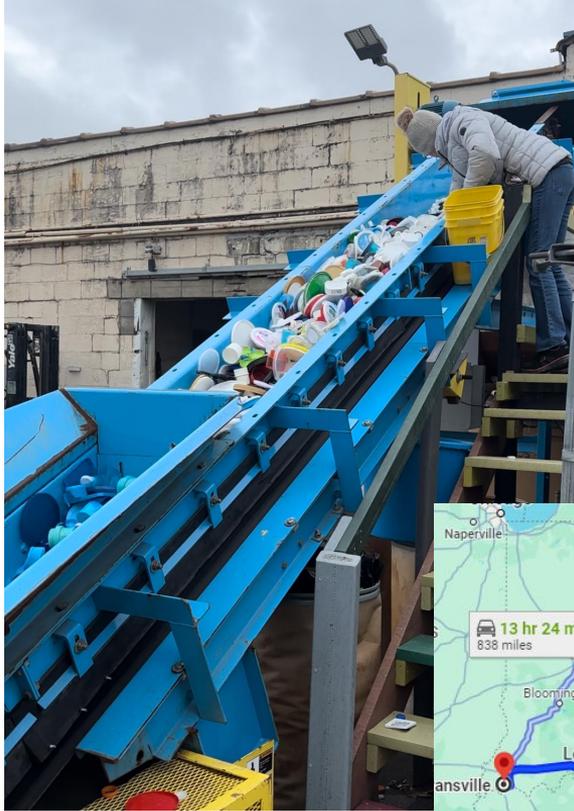
Funding provided
by:



Coin Collection

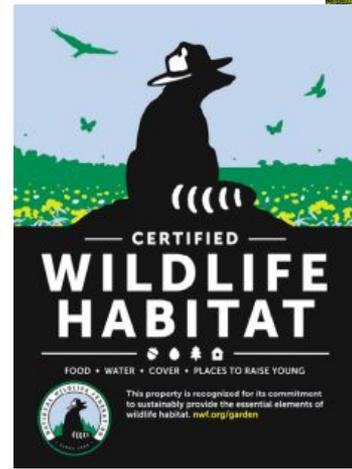


Caps to Benches



Accomplishments:

- Certification as National Wildlife Federation schoolyard habitat
- River Friendly School Award
- Registered as a Homegrown National Park
- Two Xerces Society plant donations resulting in 800 native plants for pollinator garden
- Submitted Sustainable Jersey certification
- Applying for ECO Schools certification



In June 2023, RFIS Pollinator Garden became a Homegrown National Park!



Homegrown National Park® is a term coined by Doug Tallamy as a call-to-action. "Our National Parks, no matter how grand in scale are too small and separated from one another to preserve species to the levels needed. Thus, the concept for Homegrown National Park, a bottom-up call-to-action to restore habitat where we live and work, and to a lesser extent where we farm and graze, extending national parks to our yards and communities." Joining this effort is consistent with 5th and 6th grade science curriculum which includes biodiversity, ecosystems and climate change. The Homegrown National Parks website states, "We are at a critical point of losing so many species from local ecosystems that their ability to produce the oxygen, clean water, flood control, pollination, pest control, carbon storage, etc, that is, the ecosystem services that sustain us, will become seriously compromised." Thanks to our efforts at RFIS and possibly yours at home, we can "create new ecological networks that will enlarge populations of plants and animals enabling them to weather normal population fluctuations indefinitely"



Grants received:

\$10,000 grant from NJEA Frederick L. HIPP Foundation for Excellence in Education for the accessibility (2023)

\$10,000 grant from Sustainable Jersey for technology, training and curriculum development for outdoor education (2023)

\$5000 Planet Stewards for educational supplies (2022)

\$500 grant from Foundation in Literacy and Learning to be applied towards transportation costs of benches to be used for Caps to Benches program (2023)

Teacher Scholarship for NJSTA Simmons Summer Institute (2022, 2023)

Teacher Scholarship for NASA funded GLOBE Mission EARTH (2023-24 school year)

\$2000 Sustainable Jersey grant for student council sustainability efforts

\$500 NJ STEM for Citizen Scientist projects

SPECIAL THANKS TO OUR SPONSORS



Training and Technology Support linked to this garden was funded by the PSEG Foundation as part of a Sustainable Jersey grant.



GRANDVIEW GRANGE #124



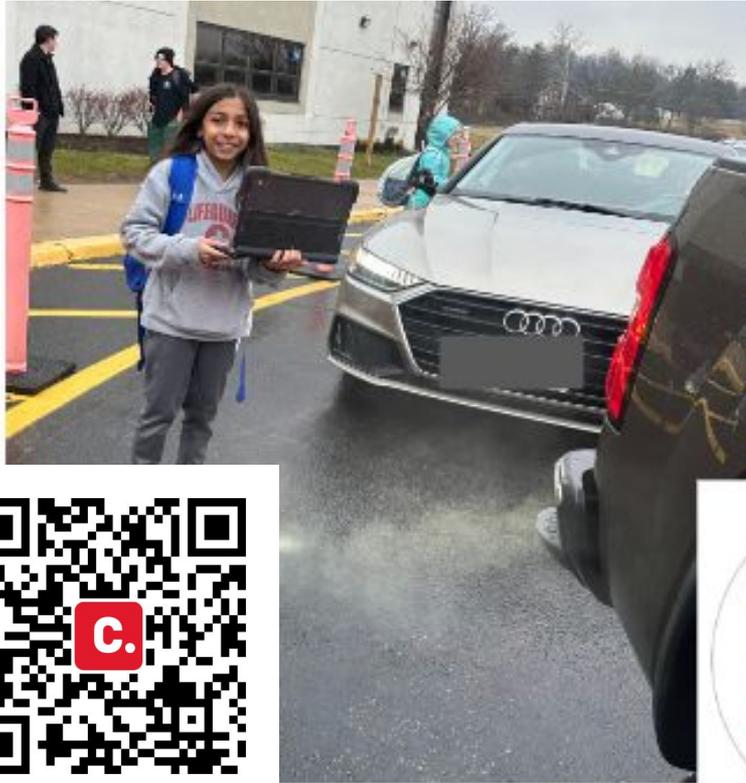
Special Thanks to Lauren Theis of Raritan Headwaters for guidance and tools!

HUGE shout out to local resident, Julia Whitley for non stop support in the garden.

Anti Idling Efforts and NASA's Help

1st In 2022, we learned with GoHunterdon about idling and the dangers to our health

Our Air Quality tests



2nd the Student Council Presented the PTO their findings and the PTO offered us great ideas to make real change



Reading-Fleming Intermediate School Student Council Aims to Give Back



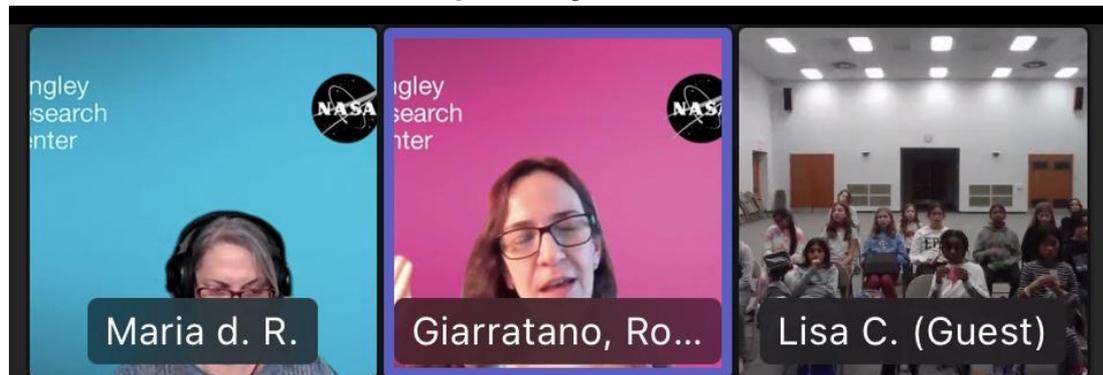
3rd They created an online petition for the community to commit to NOT IDLE including in the “Pick Up Line” but the petition did not receive much support.

The students did not give up



- reached out to NASA's GLOBE program to understand how they use air quality data in their research
- recorded daily cloud and sky color readings on the GLOBE app
- Received invitation to participate in 2024 Northeast/Mid-Atlantic (U.S) Regional Student Research Symposium
- Consulted NASA Air Quality researcher
- Secured Air Quality device to monitor air quality at RFIS

Sign the petition





Does Car Idling in Rural New Jersey Affect Air Quality?

Charlotte B., Niyam P., Connie H., Artha R.
Reading Fleming Intermediate School, Flemington, NJ



Abstract

Our research questioned whether "car idling is said to impact air quality." Using the iStations Cloud Protocol data sheet, we recorded cloud coverage, sky color and visibility, and surface conditions in front of our school during lunch time (approximately 11am). We posted this study after learning about the hazards of car idling with no wastewater in student council. It became apparent to us that our study was flawed in several ways including that we were only making observations in the middle of the day when cars were not present. In addition, our observations were subjective based on who was taking them and did not have a measuring tool to calculate the AQI (air quality index). We did consult the EPA Air Now and AQI website to gather AQI data and found interesting reading on a device. We would suggest for next year that students use a stationary measuring system so that readings can be taken everyday and throughout the day so the results can be tied to when cars are idling in the parking lot.

Planning and Carrying out the Investigation

- Our investigation involved making observations using the iStations cloud protocol checklist and entering the data into the app.
- We collected our data using the iStations protocol checklist during the week (Monday-Friday) around 11am.
- The study location was Reading Fleming Intermediate School, Flemington NJ.
- Following the advice of Dr. Margaret Pappas we compared the data to consult the EPA Air Now and AQI website.

Our team making observations while a car idles in the parent pick up line.



Results

We discovered that the air quality was consistently good and in the green color according to the AQI data.

However, we did find that on a date (February 27, March 11, and April 10) when the AQI data changed color and our observations showed foggy days at our school.

Data Relationships and Patterns

As shown in our data graph below, more than half of our cloud cover readings were on obscured days. We found this information interesting because the AQI results that changed a color were all as obscured or foggy days. In addition, when we used the iStations app, we were not prompted to record sky color on days when there were a lot of clouds which is why in Figure 4 half of our recordings did not have the sky color.

Figure 2. Daily Cloud Cover at KFIS

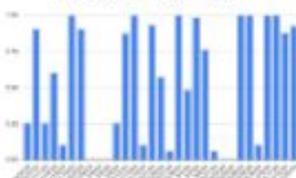


Figure 4. Sky Color Count



Background Information for Research

We wondered about air quality because we are very passionate about the environment, we only have one earth so we want to protect it.

We know about idling but we had to also learn about air quality, clouds, sky colors, cars, and the rest of the iStations protocol.

We met with the PTO to ask them what we could do to convince adults to change their idling behavior.

Our advisor met with Dr. Margaret Pappas and Kaitalia Gosselin to learn about which air quality indexes would be helpful with our research.

Research Question & Hypothesis

Our research question is does car idling in rural New Jersey impact air quality?

Our claim hypothesis is that idling does impact overall and the immediate area air quality.

This topic is important because our school because while many students walk to school, majority of the students take buses or are driven by their parents. We noticed that the bus drivers turn off their engines when they arrive at school but parents park and idle and they can pick up or drop off their kids. Our school has a little more than 700 students so the amount of idling can really add up.

Our study relates to air quality issues that can be understood through science inquiry.



Data Interpretation

Relating Data to the Research Question

Our data did not go far enough to answer our research question, we needed more data at different times of the day so we can link the car idling in the parking lot to the AQI.

We feel that our research is moving in the right direction and with more regular reading that we will be able to tie car idling at our school to air quality in our area.

We also learned that the emissions from the cars in our parking may be diluted because of our rural location but they can be transported to areas that are more populated and contribute to air quality problems in those areas.

We did not realize until we were studying our results that we had not collected sky visibility and color.

We also learned that the AQI website does not have a timer about it runs away but the IQ Air website does not have a timer in our county.

Conclusion/Next Steps

In the future we need to be more consistent. Our research only occurred when we were in school and some days we forgot.

We also had trouble because the time we were collecting data there were no cars idling. However, at 8am, 9am, and 5pm, there are many cars in the parking lot.

The AQI website that we compared our data to are not exactly so it may continue to be hard to tie the actions of our school to the overall air quality but we will try!

We would like to use a stationary sensor at our school so we can consistently collect data and share the results with the community and change the adults' behaviors.

References/ Bibliography

- iStations website especially Cloud protocol
- Custom iStations Site
- USA

Student Council shares Sustainability message locally

WASTE FREE EVENT



**RARITAN
TOWNSHIP
GREEN FAIR**

@Raritan Township Municipal Building

RAIN OR SHINE!

May 4 11am- 2pm

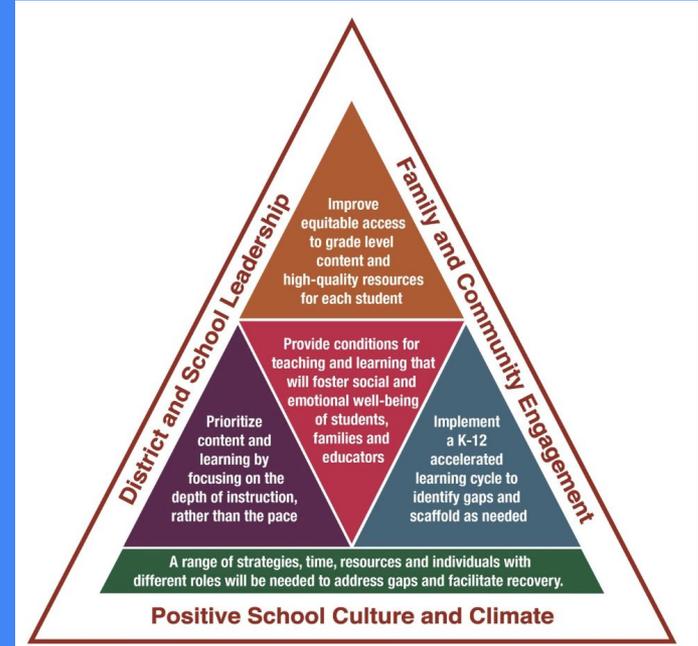
Excellence in Learning

RFIS is being recognized for post-COVID learning acceleration and will participate in the *Promising Practices Project*, a research initiative commissioned by the NJ DOE.



The research is conducted by The New Jersey State Policy Lab and the Joseph C. Cornwall Center for Metropolitan Studies at Rutgers University.

RFIS is experiencing learning acceleration at a rate that is greater than other comparable schools. The study will identify impactful, innovative, and replicable practices.





Thank you!

