



Breaking the Sun Barrier

AAR-SJ Project




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Introduction

- Juniors at Henry M. Gunn High School
 - Part of the **Advanced Authentic Research** Class
 - Social Justice Pathway
 - **Breaking the Sun Barrier** → Target misconceptions about sun safety
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What's the need?

Research

- Melanoma cases are rising **1.2%/yr**
- California receives **30%-55%** more sunlight annually (compared to the global average)
- **1 in 3** California school districts have sun protection policies
- **1.8%** of elementary schools in California teach sun protective methods



Finding the need – Interviews

Expert interview: Dr. Bryan Cho

“**80%** of all the sun damage people receive happens before the age of **20.**”

- Emphasized the need for sun safety to be taught in schools
- Recommended a presentation format



Empathy interviews: Fletcher students

“In school, we don’t really talk about skin protection at all.”

“If it was brought to our attention, more people would start caring.”

- Demonstrated interest in the issue
- Recommended informational lectures



Our vision



Sunscreen Drive

Support individuals and families
who cannot afford sunscreen



Informational Presentation

Help teach California youth how to
protect their skin

Steps

Sunscreen Drive

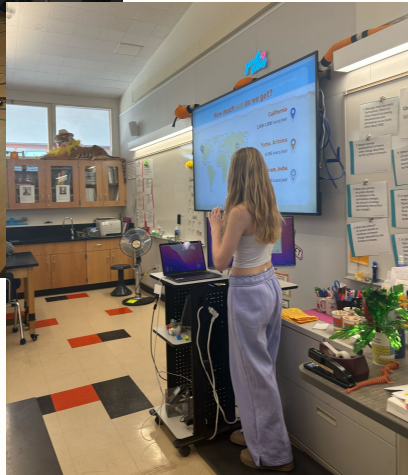
1. Researched different organizations that provide free hygiene products
2. Contacted Meghan Freebeck - *Simply the Basics*
 - a. They agreed to partner with us
3. Began our Amazon digital sunscreen drive!

Informational Presentation

1. Drafted and finalized the presentation
2. Revised by Dr. Bryan Cho & Dr. Michael Gisondi
3. Prototype presentation to AAR class
4. Contacted teachers at Ellen Fletcher Middle School
5. Presentations scheduled

Skin Safety Presentations

- **4** classrooms
- Discussed the science behind sunscreen
- Shared different forms of sun protection (clothing, hats, sunglasses)
- Showed a short video going deeper into our topics (TedTalk)
- Answered questions
- Pre & Post surveys



How did we conduct research?

3 Questions

1-3 scale

Results: Are you familiar with different sun protective options?



30%

A donut chart with a light yellow outer ring and a dark blue inner ring. The dark blue inner ring represents 30% of the total circle.



Initial

Most had little to no understanding



90%

A donut chart with a light yellow outer ring and a dark blue inner ring. The dark blue inner ring represents 90% of the total circle.



Final

Thorough understanding

Results: Do you understand the purpose and benefit of using sunscreen?

59%



Initial

A little over half felt familiar

95%



Final

Majority found they had a thorough understanding

Results: Do you think it's important for California youth to learn sun safety practices?



85%



Initial

Most agreed with the statement



98%



Final

Nearly every participant agreed

Findings & Takeaways: Presentations

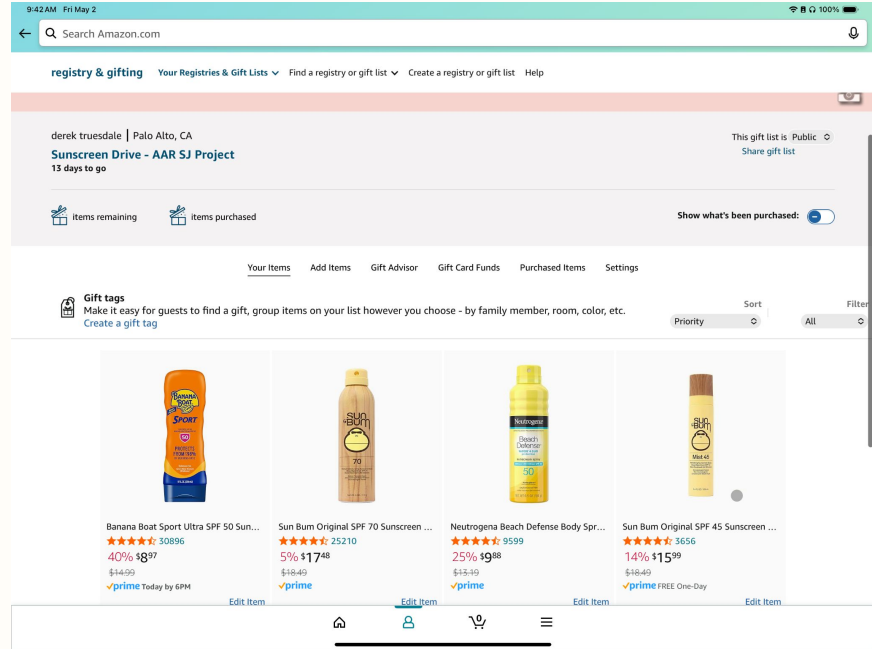
- Lectures were successful!
- Participants improved within all three areas of understanding
- Participants were engaged during the lecture
- Participants gained a deeper understanding about the importance of skin protection

Obstacles:

- Scheduling time slots with teachers
- Answering tough questions
- Keeping the presentation engaging

Sunscreen Drive

- Amazon digital drive started in early **March**
- Messaged friends, family, and coworkers
- **50** bottles collected
- Projected **150** by the end of **July**



Findings and Takeaways: Sunscreen Drive

- Success!
- On track to meet our goal of **150 bottles**
- Those we reached out to were excited to help this cause
- People care about this issue

Obstacles:

- Finding donors
- Encouraging others to spread the word

Next steps

Sun Safety Presentation

- Contacting local **summer camps** to find interest
- Potentially sharing the slidedeck to other high schoolers
- Reach out to more **middle schools**

Sunscreen Drive

- Continuing the drive through **July**
- More outreach: community events, posters, etc.
- Sunscreen will be delivered to *SimplytheBasics* in early **August**

Thank you's

- Foothill Symposium
- Gunn AAR program - Ms. Firenzi
- YCS
- SimplytheBasics - Meghan Freebeck
- Dr. Cho & Dr. Gisondi
- Fletcher Students
- Ellen Fletcher Middle school - Ms. Ahern, Mr. Cox, Fletcher students





Thank you!

Have a nice day!



Resources

- https://seer.cancer.gov/statfacts/html/melan.html?utm_source=chatgpt.com
- https://www.currentresults.com/Weather-Extremes/sunniest-places-countries-world.php?utm_source=chatgpt.com
- https://pmc.ncbi.nlm.nih.gov/articles/PMC3475509/?utm_source=chatgpt.com

