

NATIONAL DESIGN PROJECT

*An initiative of the
Design Education Advisory Committee*

2023

St. Anthony's Primary School
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Stage 1: Scope

Design for wellness: Workplace

For students all around Singapore

For Primary and Secondary schools

Students have only 25 minutes of recess to:

Eat

Go toilet

Refill water bottle

Go bookshop to buy what they need

play@recess

Go to the library

Meet a teacher

Participate in activities at Inspire Corner





Queue here

LEE SHAN HING PTE LTD	\$ 1,000.00	CHEN HAN TEE	\$ 1,000.00	LIU SHUN TON	\$ 1,000.00	WONG YUEN WING ERNEST	\$ 1,000.00
LEE SHAN HING	\$ 1,000.00	LIU SHUN TON	\$ 1,000.00	WONG YUEN WING ERNEST	\$ 1,000.00	YEO KEN YONG STEVEN	\$ 1,000.00
LIU SHUN TON	\$ 1,000.00	WONG YUEN WING ERNEST	\$ 1,000.00	YEO KEN YONG STEVEN	\$ 1,000.00	YEW HONG LEONG	\$ 1,000.00
WONG YUEN WING ERNEST	\$ 1,000.00	YEO KEN YONG STEVEN	\$ 1,000.00	YEW HONG LEONG	\$ 1,000.00		
YEO KEN YONG STEVEN	\$ 1,000.00	YEW HONG LEONG	\$ 1,000.00				
YEW HONG LEONG	\$ 1,000.00						

Pacific Bookstores
Your Partner in Education.

BOOKSHOP

How might we ...
Design a **solution**



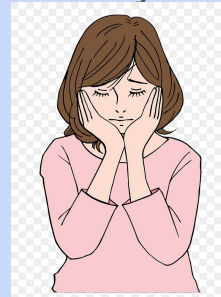
For **students at the bookshop**

In order to **solve the problem of queuing
so long only to find that the item they
needed is out of stock.**

Why is it a problem?

The problem

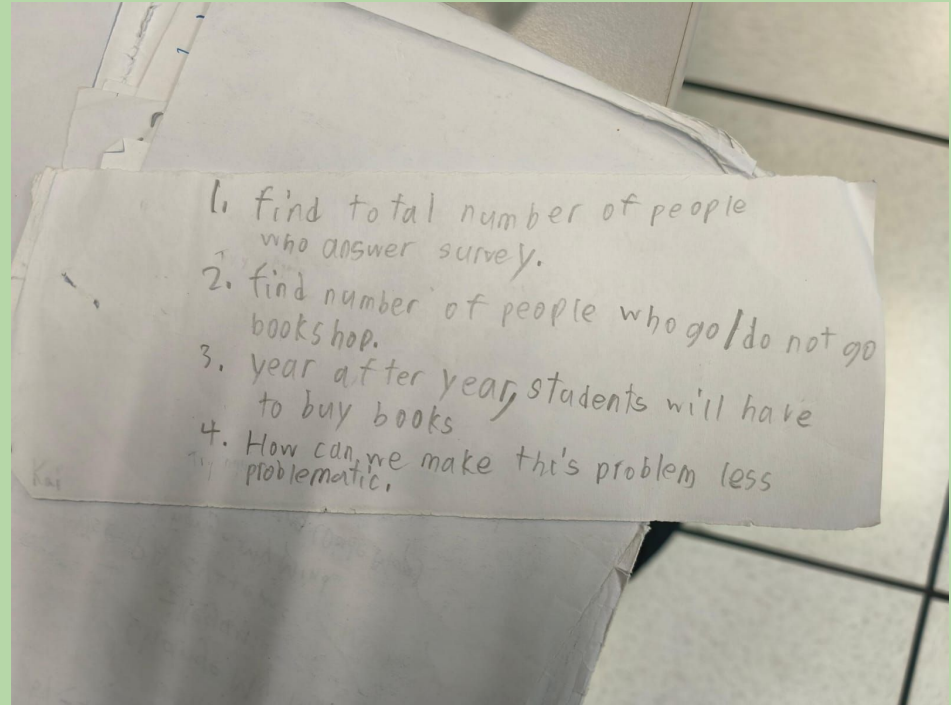
At the start of the year, many students will be missing out on some items needed for learning. And they will queue up at the bookshop for a very long time as the queue is usually long. While queueing up, they do not have time to eat and do all the other activities that is needed during recess. Many queue for a very long time only to find out from the bookshop auntie that the books they need are already out of stock. Students will be left hungry and sad as they might get scolded by the teachers for their missing items and teachers would not be able to give them extended time to eat therefore they might have a tummy ache and feel sick throughout the day from not eating.



Stage 2: Explore



We started by discussing about how we should solve our problem.

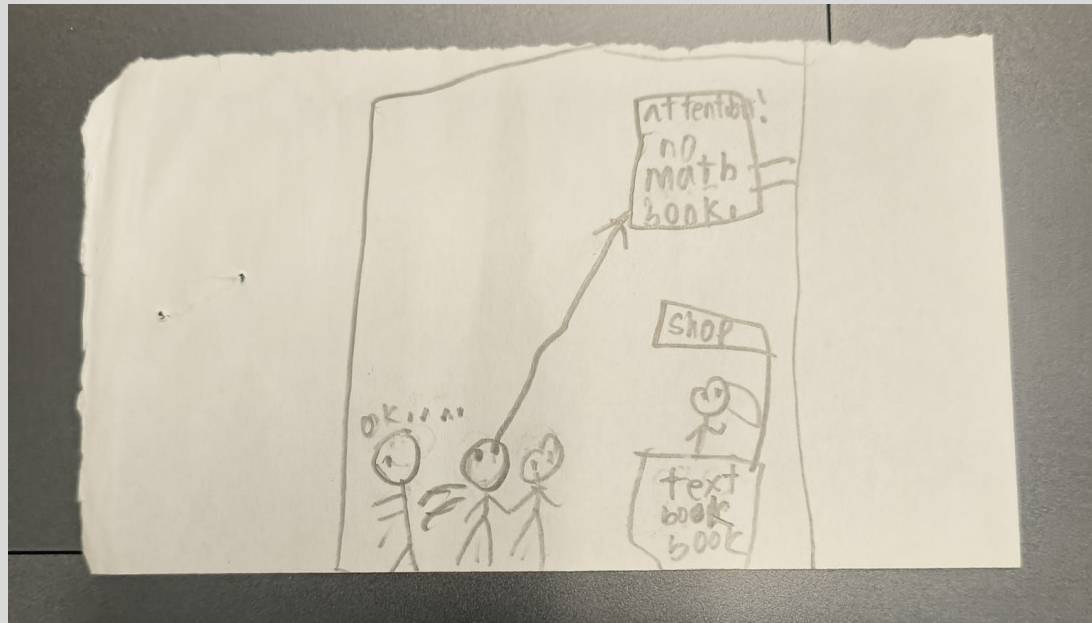


7.09 a.m.

Alert!

No PAL book
thank you.

No notification



7:09am

Sold out

(item)

(pic)

Arrival

(item) (time+date)







Survey:

First, we asked some students some questions.

Q1. Do you go to the school bookshop?

Q2. Do you know if the item you want to buy is sold out?

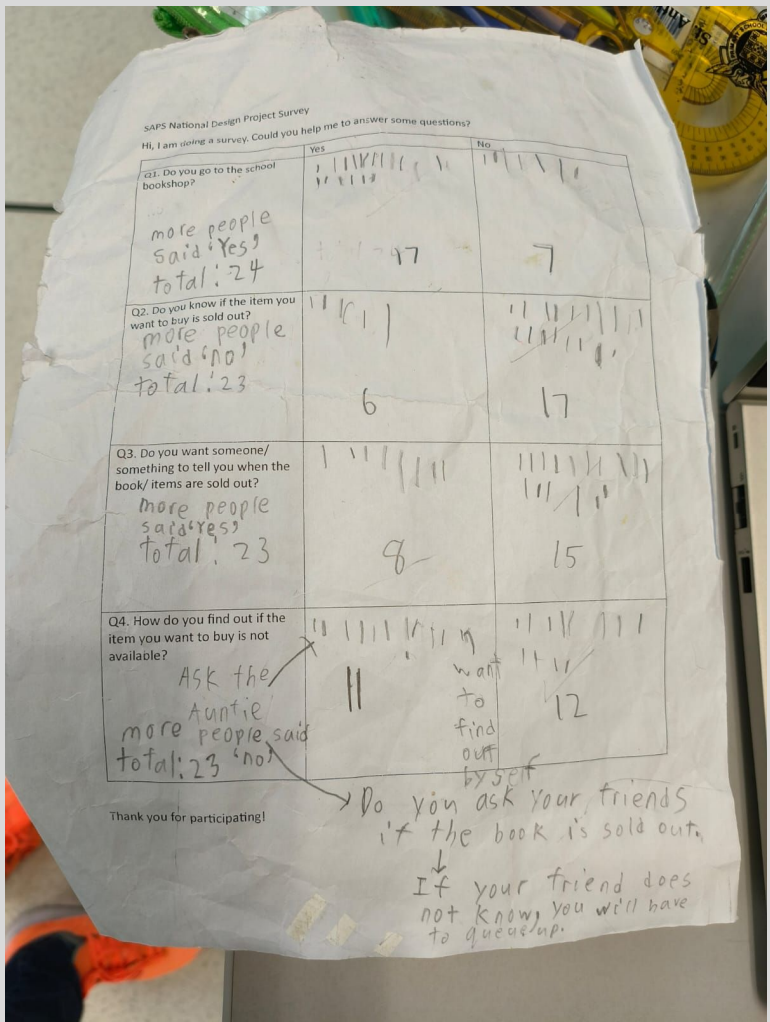
Q3. Do you want someone/something to tell you when the book/items are sold out?

Q4. How do you find out if the item you want to buy is not available?





Stage 3: Experiment



SAPS National Design Project Survey
Hi, I am doing a survey. Could you help me to answer some questions?

	Yes	No
Q1. Do you go to the school bookshop? <i>more people said 'yes'</i> total: 24	 7	 7
Q2. Do you know if the item you want to buy is sold out? <i>more people said 'no'</i> total: 23	 6	 17
Q3. Do you want someone/ something to tell you when the book/ items are sold out? <i>more people said 'yes'</i> total: 23	 8	 15
Q4. How do you find out if the item you want to buy is not available? <i>Ask the Auntie</i> <i>more people said 'no'</i> total: 23	 2	 12 <i>want to find out by self</i>

Thank you for participating!

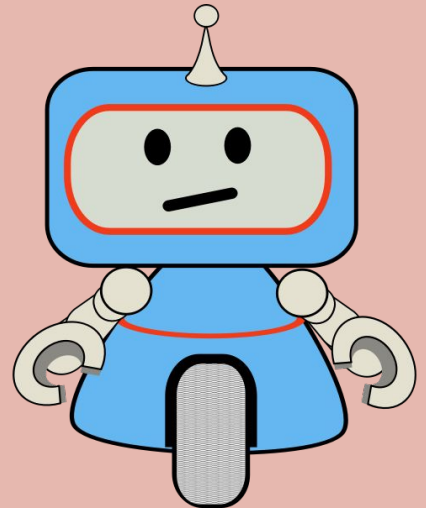
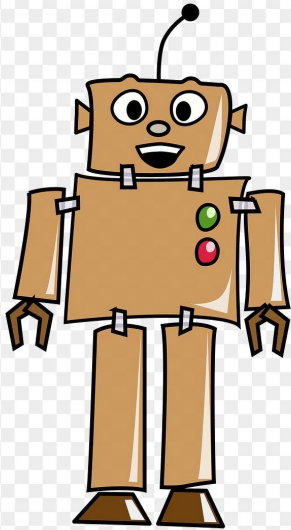
Do you ask your friends if the book is sold out.
↓
If your friend does not know, you will have to queue up.

A sample of our survey done

Those people who tried to find out (if the bookshop items are sold out) asked the bookshop Auntie or their friends before queueing up (12 out of 23 people)

There are also some people do not know who to ask, finds out by themselves and wants someone to tell them when something is sold out. (12 out of 23)

Stage 4: Prototype





BOOK SHELF



What is our prototype made up of? (TV Screen)

- Tea box
- Microbit
- Cardboard
- String and needle



What will the screen show?

Books out of stock

Math 4B Textbook

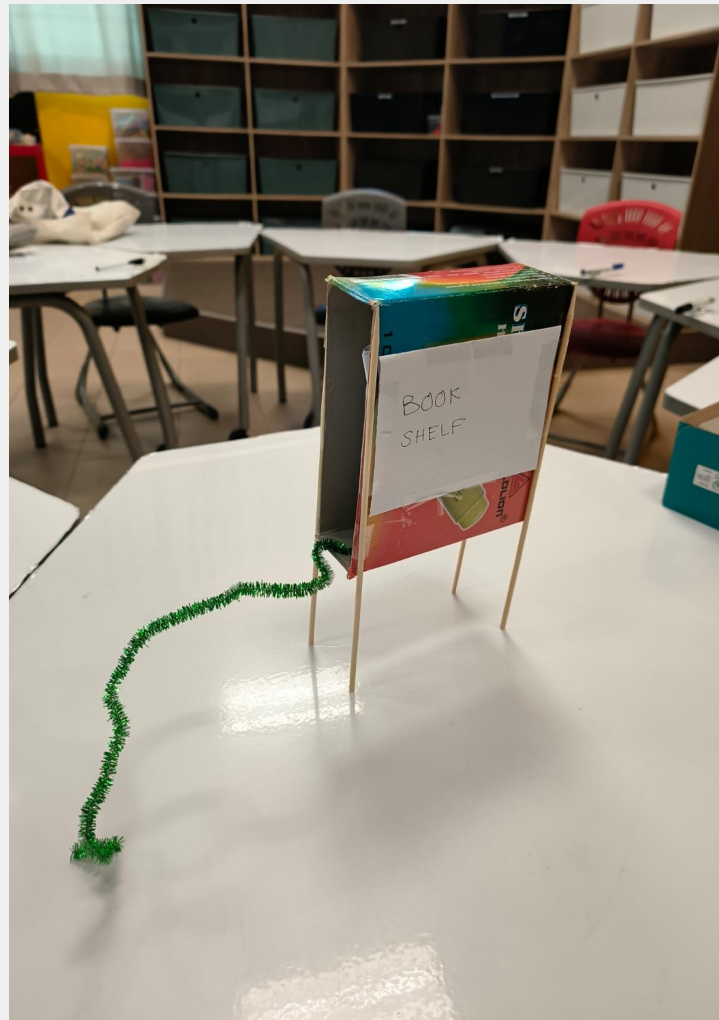
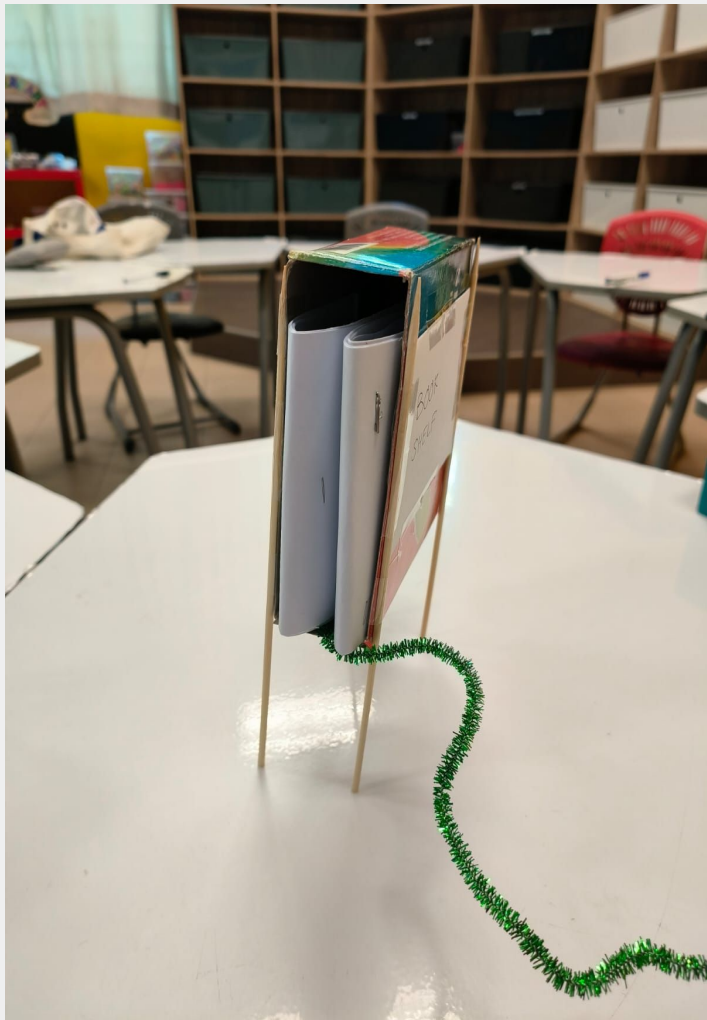
Social studies book



Arrival date of books

January 14 2023

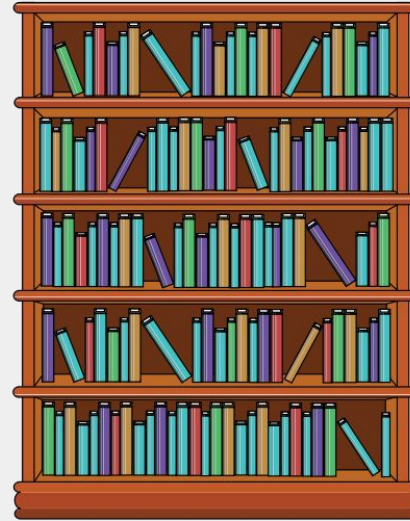
March 28 2023



This is a
prototype of
our shelves.

What is our prototype made up of? (Bookshelf)

- Paper
- Box
- Satay sticks
- Pipe cleaner



How does our prototype work?

When the bookshop aunty takes out the last book in the shelf, a sensor will be activated, and the book will be listed on a TV screen. In the canteen and bookshop.

How to solve the problem

8 out of 23 people (from the survey) want to know if the items is sold out before queueing up. So the solution is to have screens to display if the item(s) is sold out.



So students would not waste time queueing and can eat or do other things that they need within the 25 minutes.

Using TV screens to display the stocks and availability of books



THANK YOU

