

-STEM FAMILY WORKSHOP-

Exploring the Basic Chemistry of Household Cleaning

WORKSHOP OVERVIEW

- EVENT: 復活親子墟市 (EASTER FAMILY HUI MARKET)
- LOCATION: WAI CHI STREET PLAYGROUND, SHEK KIP MEI
- TIME: 20/4 (SAT) - 21/4 (SUN)
- THEME: ENVIRONMENTAL FRIENDLY, FAMILY ACTIVITIES

INTRODUCTION

Partner Organization

- HKCSS

Target

- Grass-root Family
- Children of 7-12 years old

Partner Needs

- Promote Eco product
- Designed for family
- Low cost in production for household to save money)

Workshop Statistics

20/4 1:30pm - 3:00pm

- 5 Families
- 9 Children

21/4 1:30pm - 3:00pm

- 5 Families
- 6 Children

21/4 4:00pm - 5:30pm

- 4 Families
- 6 Children

Total:

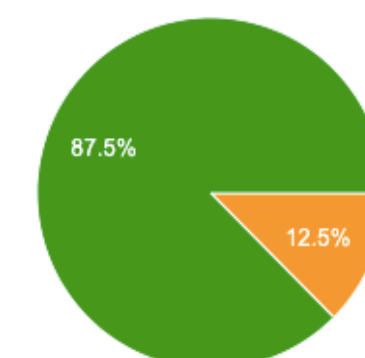
21 Children/14 Families

- collect responses from participants before and after the workshop
- compare the change of responses
- total respondent = 13

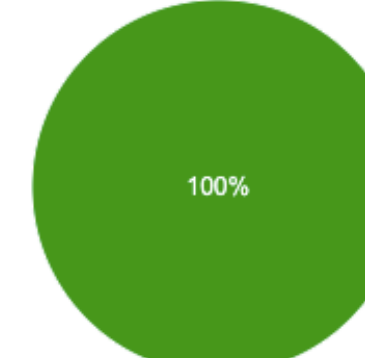
1. Which of the following is the benefits of using natural detergent?

1. Better cleansing ability
2. Cheaper
3. More environmental friendly

Before

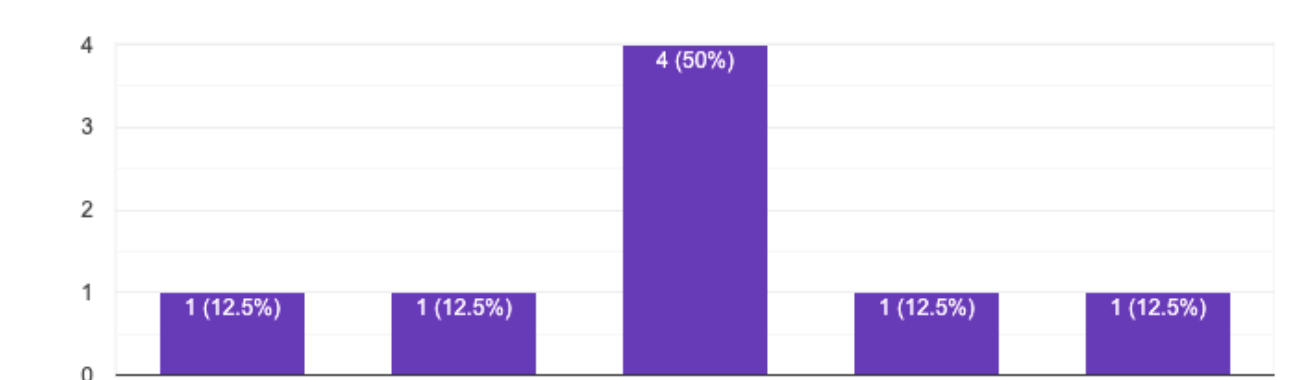


After

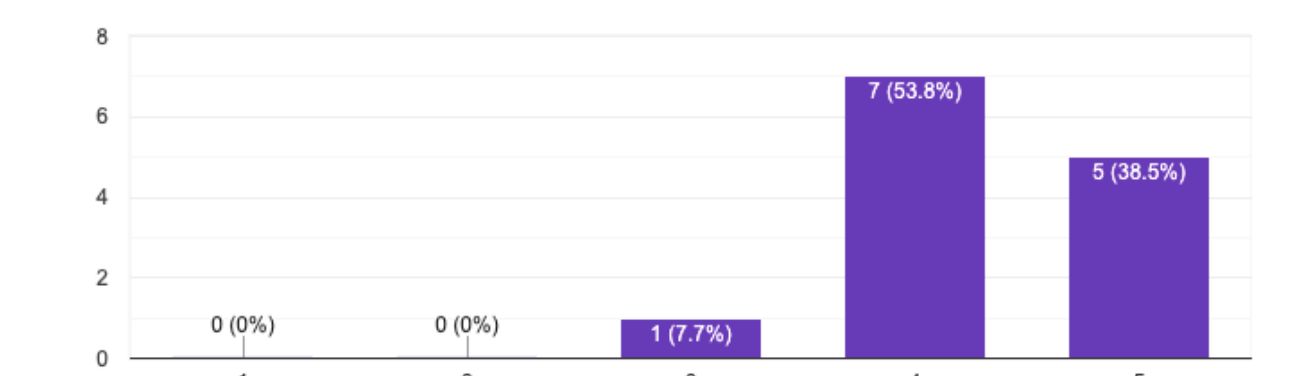


2. Change of confidence of participants in making toilet boom (1: lowest - 5: highest)

Before

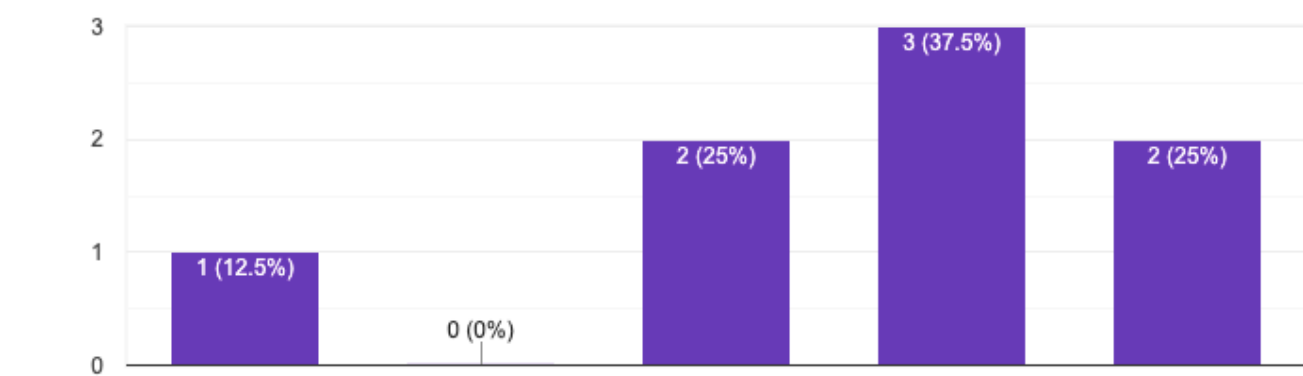


After

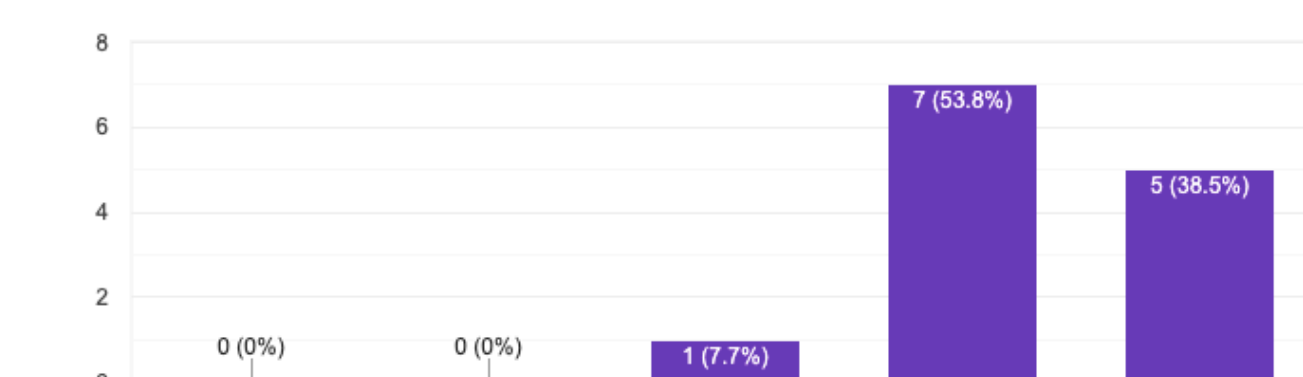


3. Change of awareness of participants on chemical composition of detergent (1: lowest - 5: highest)

Before



After



DESIGN RATIONALE

OBJECTIVE 1

CONNECT WITH OUR PARTNER

Eco-friendly

- ✓ Toilet Bomb: Non-toxic toilet cleanser

Design for grass-root family

- ✓ Low cost in production
- ✓ Interesting STEM activities for families

Sustainable

- ✓ Develop a sustainable Kit-set
- ✓ Future development for this workshop by our partner

OBJECTIVE 2

S-T-E-M ELEMENTS

S

- chemical reaction of toilet bomb and waste
- color change of in different pH

T

application of baking soda (sodium bicarbonate) and citric acid in household cleaning

E

production of toilet cleaning bomb

M

Hand-on measurement by children using measuring cups

Reflection & Limitations

Setting

- Outdoor set-up
- No electrical supply

Target Audience

- Target to recruit 75 people (25 families)
- Limited by venue

Participant

- Only accept online pre-registration