

U-STEMist Scheme, session 2018 - 2019

Group 10 D.N.A: Mr Bean



Introduction

Community Partner:

The Y.W.C.A. Hioe Tjo Yoeng College

Mentor:

Professor Lam Hon Ming

Our project theme: Soybeans



01 Evaluation on the achievement of the goals

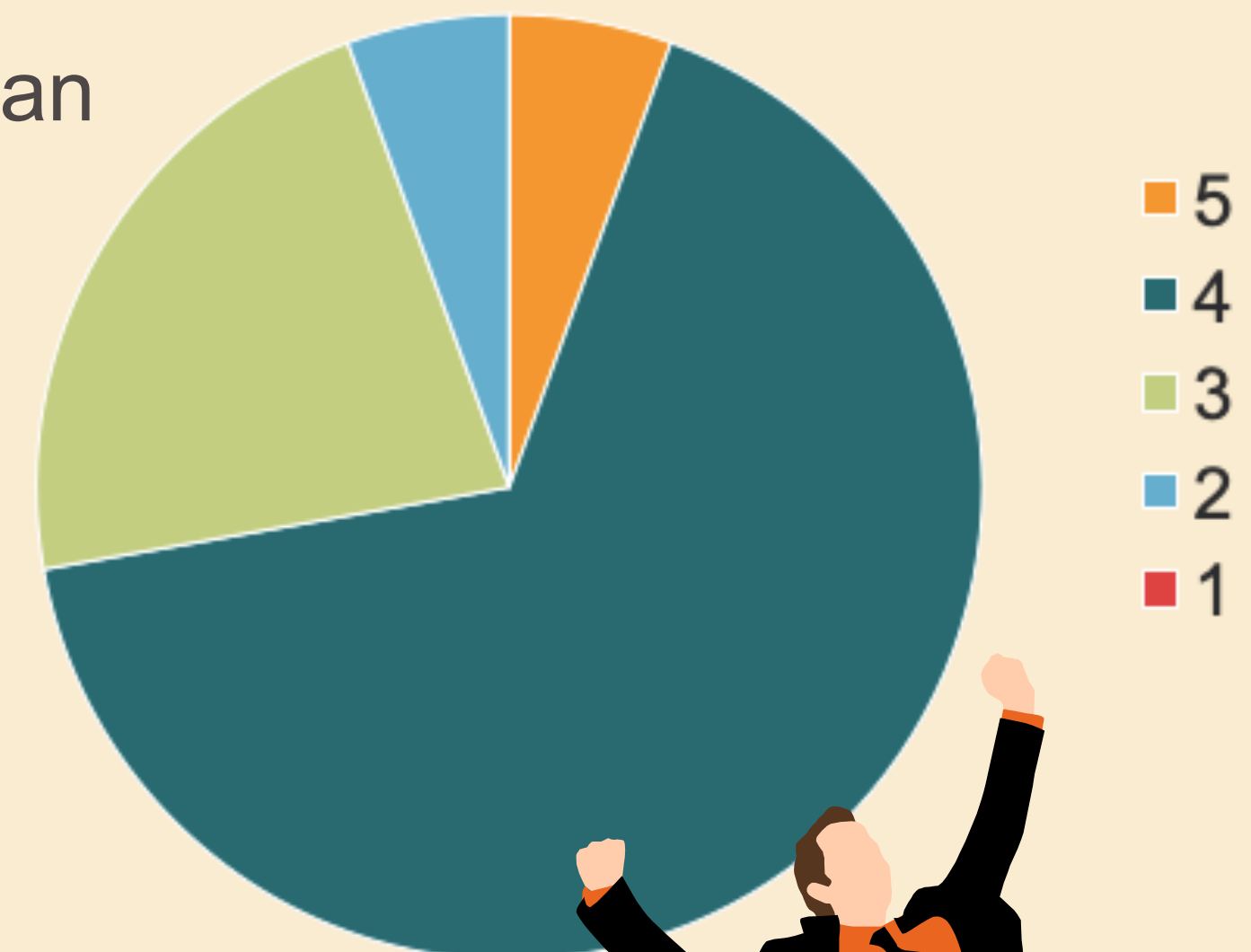
1. To understand the current agricultural situation
2. To identify the problems that HK farmers are facing

✓ Narrative farm visit tour by U-STEMists
✓ Students' responses collected through *EduVenture* (which can show students' understandings)

3. To find out solutions that can help the local farmers
4. To develop explorative and critical thinking skills
5. Able to incorporate STEM into their daily lives

✓ Held 3 different workshops which cover different STEM fields
✓ Comments collected from end-of-workshops evaluation forms

This program has enriched your knowledge in STEM related subjects. (1 = very disagree, 5 = very agree)



02 Deliverables



Farm Visit to Tai Lung Experiment Station

Date: 1/2/2019

Time: 1400 – 1630

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- ✓ Guided tour to no-tilt farm, germination room, greenhouse, organic farm, soybean farm
- ✓ Students' responses collected through *EduVenture* App

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Soybean Growing Workshop

Date: 15/2/2019

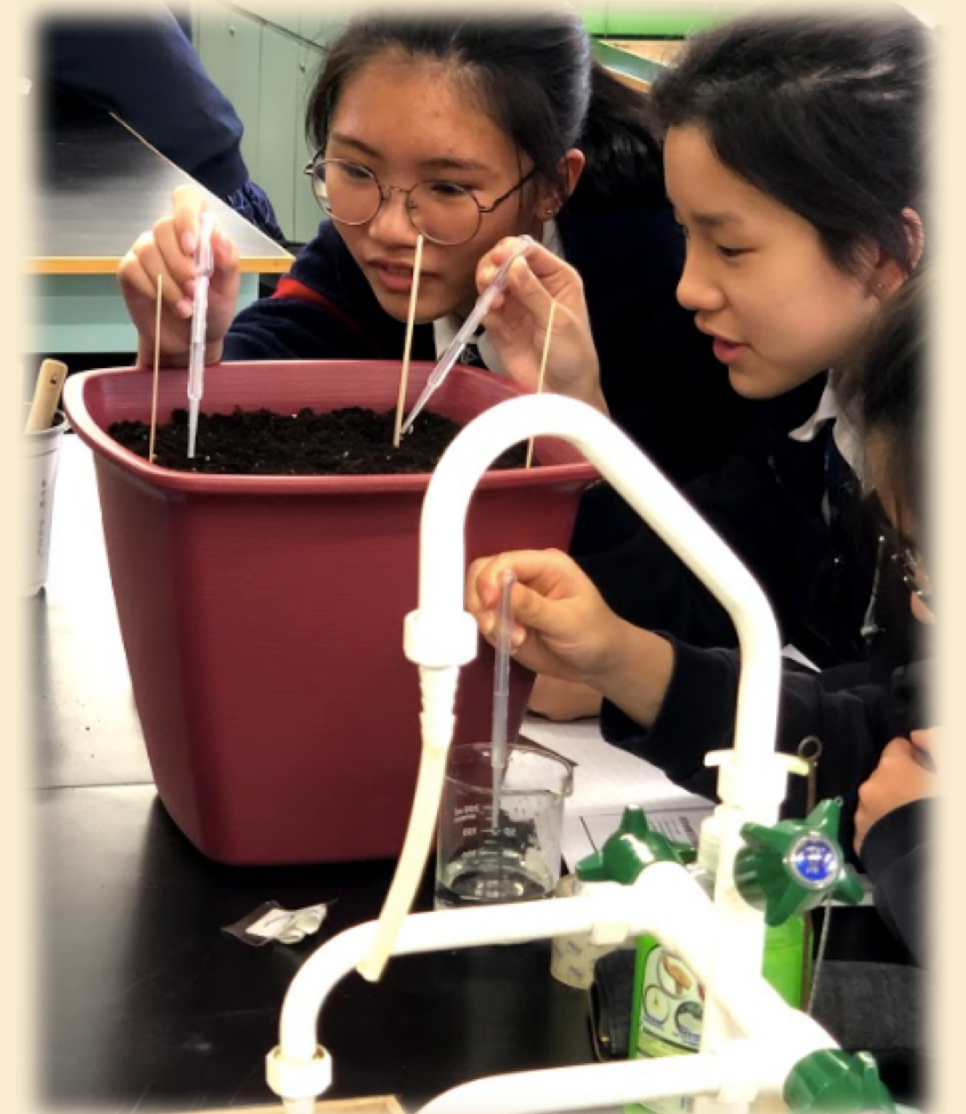
Time: 1600 – 1730

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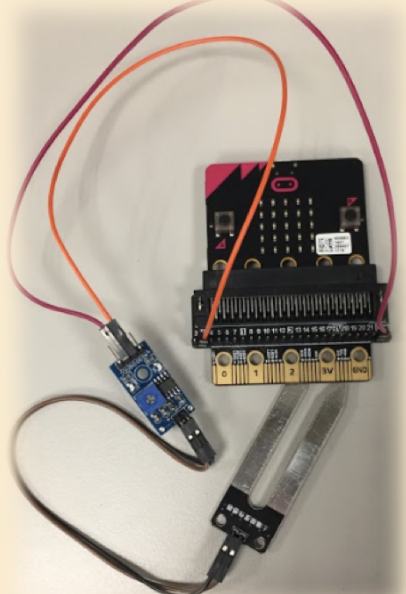
- ✓ Acquired basic soybean planting knowledge
- ✓ Planted their own soybeans
- ✓ Designed experiments
- ✓ Designed a **data log book**



Micro:bit Humidity Sensor & DIY Greenhouse Workshop

Date: 15/3/2019

Time: 1600 - 1730



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- ✓ Learnt how to draft basic **Micro:bit** codes
- ✓ Made simple humidity sensor
- ✓ Designed greenhouse with given materials

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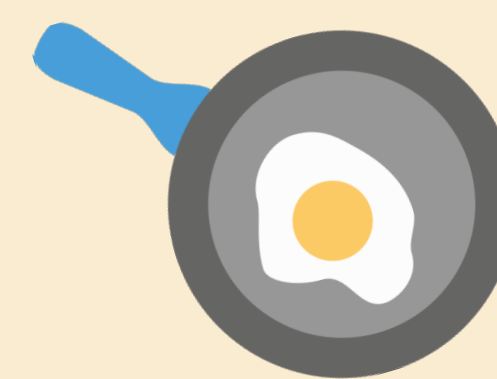
Soymilk and Beancurd Dessert Making Workshop

Date: 26/4/2019

Time: 1600 - 1730



- ✓ Learnt about **food sciences** during cooking process
- ✓ Carried out **Biuret Test** to compare the protein content of different soybean products



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03 Limitations

Team background

- All come from biology field, lack of knowledge and experiences on other STEM fields.

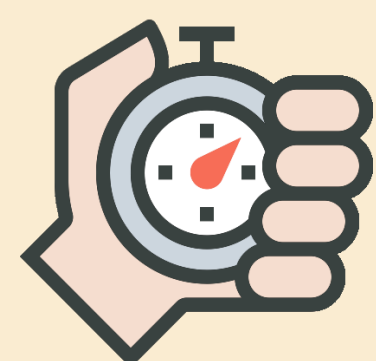


Group planning

- Difficult to gather due to different class schedules.

Time management

- Limited workshop hours (overran a lot)



04 Self-reflections

Frankie: Ustemist scheme granted me opportunities to gain experience in organizing, preparing and implementing the STEM project.

Brian: It is a great opportunity for me that I could participate as a part of the U-STEMist program in order to be a well trained teacher.

Joy: U-STEMist scheme provides me with a very good experience of learning how to prepare for STEM workshops and how to teach the secondary students in an innovative manner.

Gigi: We encountered a lot of obstacles throughout the whole program, but i am so satisfied that our project has been implemented successfully.

Jessie: I learnt a lot through the program and i believe all the skills and experiences acquired would make me a successful science teacher in the future.

Thank you!