# THE IMPACTS OF FOOD KNOWLEDGE FOR CHILDREN: PROPER DIETARY HABIT AND FOOD WASTING BEHAVIOUR

# Hui Kee, Yap, Olajide Opeyemi Joseph, Dr. Muhammad Abd Hadi Bunya, Dr Mahyuddin Arsat

School of Education, Universiti Teknologi Malaysia, 81310 Skudai, Johor, Malaysia.

huikee91@gmail.com, olayem08828@gmail.com, mabhadi@utm.my, mahyuddin@utm.my

Highlights: A common behaviour found among preschool or kindergarten students; food wasting behaviour. Four root causes identified. The team acknowledged that the children did not have proper knowledge and concepts of foods. Therefore, a teaching aid named "FOOD FOR ME" introduced to answer the four root causes; "What are food?, Where do food come from?, How much food do people need? and Why do people need food?" This product aimed to to teach and provide preschool/ kindergarten students with the knowledge about sources of food, life- cycles of the sources of food, knowledge about food classification and the knowledge of benefits of food groups to our body. The teacher found that the students mastered most of the knowledge in three trials. As a result, this product was assumed to successfully help learners in generating a proper dietary habit as well as initiate a reduction in food wasting behaviour.

Key words: Teaching aid; Knowledge of food; Food wasting behaviour; Education

#### Introduction

One of the team members worked in an international school. She worked with early childhood students who aged approximate 4 to 6 years old. Within the time frame of one and a half year, she met more than 50 students. And, a common behaviour found among them; the food wasting behaviour which occurred regularly. To be precise, the food wasted were edible foods. They threw uneaten foods of their meal into the bin as they lose their appetite.

As mentioned, food waste in this context defined as throwing the edible leftover foods from the child's meal into the bin. A question arose; how to teach the children to finish their food in the meal with own initiative? To answer the question, we need to find the root cause(s) of the issue. The team acknowledged that the children did not have proper knowledge and concepts of foods. As a result, after discussion with the lecturers and the team member, we found four root causes of the issue; "What are food?, Where do food come from?, How much food do people need? and Why do people need food?"

Past research revealed numerous reasons contributing to food waste in schools (WRAP, 2011). However, the focus of current project is the behavioural reasons contributed by students (WRAP, 2011). In accordance with the past research, the students do not have a proper dietary habit (Falasconi, Vittuari, Politano, & Segre, 2015). This circumstance specifically highlighted by Falasconi et al.'s study whereby the interviewed teachers revealed students having snacks and packet drinks during the break (Falasconi et al.). Consequently, they are not hungry when the meal is served (Falasconi et al.). Strictly speaking, the student's diet mainly filled with sugary foods instead of a proper diet that contain all nutrients needed for growth.

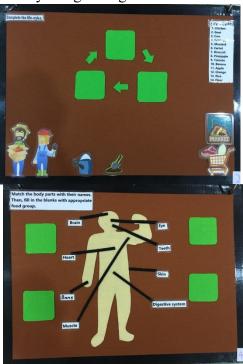
As a result, to relate to teaching and learning process, the current product aimed to fill the gap for the behavioural reasons. This product desired to provide basic knowledge on food such as sources of food, life-cycles of the sources of food, food group classification and the benefit of each food group to the body. With these knowledge, it presumably generates a proper dietary habit and also initiate changes in students' behaviour (food waste).

The name of the teaching aid is "FOOD FOR ME", targeted for children age range from 4 to 6 years old. A manual is provided for the adults to teach the children. The product will need guidance from the adults for the first few trials. As the children learned the knowledge, adults allow the children to use the product independently. The size of "FOOD FOR ME" is 29 x 43 cm (A3). And, the learning outcomes of "FOOD FOR ME" include:

- I. Have the knowledge of sources of food by building their own farm.
- II. Have the knowledge and ability to build the life cycles of the sources of food.
- III. Have the knowledge food group classification, the ability to categorize food into their respective group as well as the concept of appropriate amount of food needed in each meal.

IV. Match the words and the parts of the body correctly. Showing understanding on the benefits of food groups on the body parts by categorizing them.





### **Content**

#### Advantages

- Develop knowledge on sources of food, life- cycles of the sources of food, knowledge about food classification and the knowledge of benefits of food groups to our body.
- Combination of subjects; Science + English
- Positive learning interaction of the students and the adults (e.g teacher)
- Novelty

#### Important to Education

- Teachers: New way of teaching and learning
- Students: Engaged learning due to its novelty
- School: Provide the schools with a new tool which may help the process of teaching and learning which later may improve students' behaviour.

## Commercial Value

- Can be commercialized by promoting to the preschool or kindergarten for their learning.
- Can be commercialized by promoting to the parents as a game to play with their children.

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## **References** (Use APA format)

Falasconi, L., Vittuari, M., Politano, A., & Segre, A. (2015). Food waste in school catering: an Italian case study. *Sustainability*, 7, 14745-14760. doi: 10.3390/su71114745

WRAP. (2011). Food waste in school. Retrieved from

http://www.wrapcymru.org.uk/sites/files/wrap/Food%20Waste%20in%20Schools%20Summary%20Report.pdf