

The goals:

## Science is Fun

## Ilia State University

Tbilisi № 145 public school Marine Bagalishvili - a biology and science teacher

**The target group** – the pupils of 8¹ class

## The partner enterprises:

- Ice-cream factory "Tolia" Ltd "Kartu Universali";
- G. Eliava Institute of Bacteriophages, Microbiology and Virology

## Action research to support the study of science

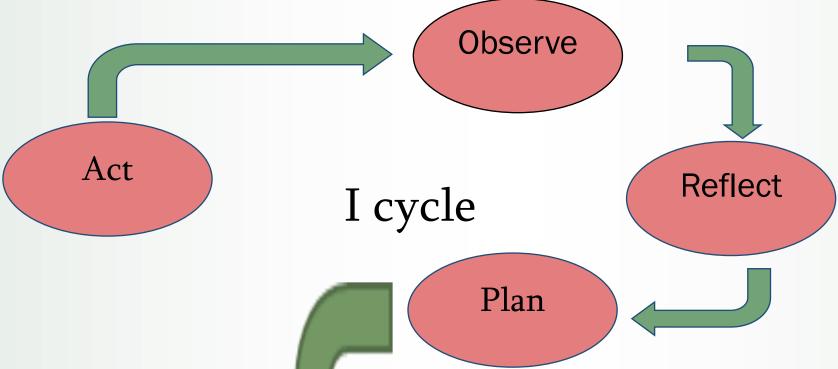
- to investigate the reasons of a low motivation among the target group to study science;
- to raise the pupils' interest towards science subjects;
- to arise the pupils' desire to be involved in science sphere;
- to develop the pupils' research abilities;
- to get the additional knowledge on the own organism, microorganisms and the food safety.
- to make clear how the pupils' motivation toward the subject is increased.



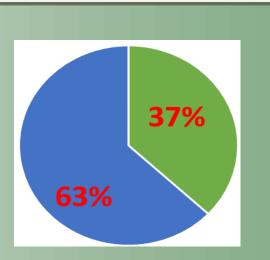
**The 1**st inquiry - to determine a level of the pupils' motivation toward the science study; A class observation on the pupils' discussion, doing their homework, as well as making presentations.

Observe

The research question: what is the reason of a low motivation to Act study science subjects in the target group and how the pupils' interest should be increased in this direction? The development of research plan and questionnaire.



The 1st inquiry showed the pupils' less interest toward the science in comparison to other subjects. Namely, only 37% of pupils liked a science subject. The main reason was the subject complexity.



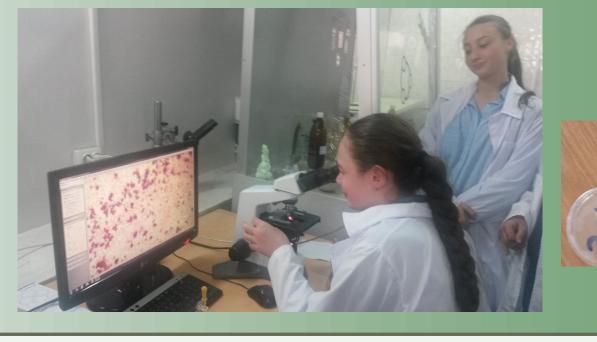
To increase the pupils' motivation, the lesson module was developed and their visit to the ice-cream enterprise was planned.



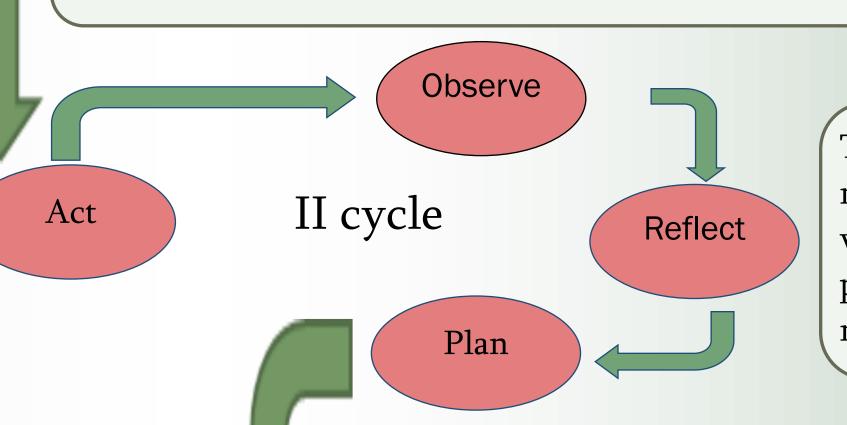


Research diary: the pupils observation;

The 2<sup>nd</sup> inquiry: to determine a level of the pupils motivation toward the science study after introduction of the module.



The pupils of 7<sup>1</sup> class visited the ice-cream enterprise "Tolia" and took part in the icecream biochemical and microbiological research with assistance of the enterprise laboratory staff. Besides, the pupils interviewed some employees of the enterprise. The pupils prepared the presentations and shared to the classmates. The lesson module was introduced including the processing of the scientific information and the microbiological experiments to be carried out in a school laboratory.



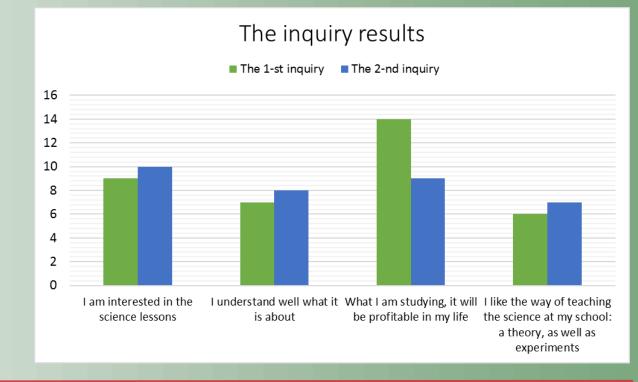
The research results showed that the indicators of the pupils' motivation slightly improved, but some indicators slightly worsened. This result was presumably caused by the participation of only one group in the laboratory biochemical and microbiological research of the enterprise.





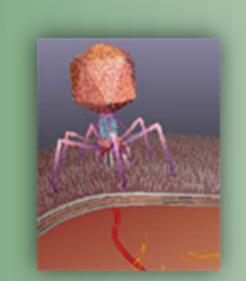


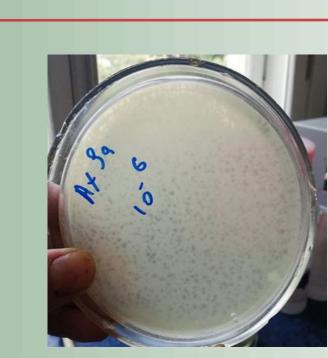
The whole target group will be involved in the implementation of the next stage research.



The research outcomes



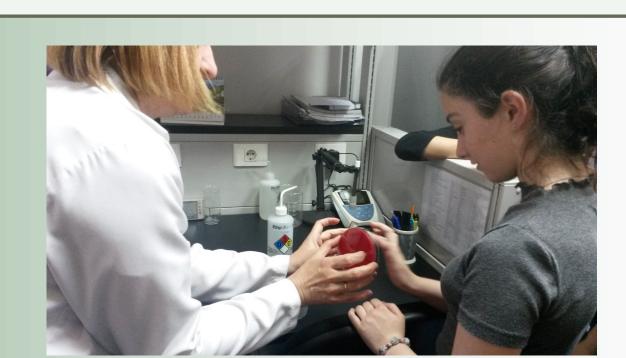






Research diary: the pupils observation;

The 3<sup>rd</sup> inquiry: to determine a level of the pupils motivation toward the science study after introduction of the module.



The visits of 8th class pupils to the enterprise, museum and laboratories of the G.

Eliava Institute of Bacteriophages, Microbiology and Virology were planned and re-

alized. The lessons/practical work oriented to a pupil were planned and conducted.

The whole target group will be involved in the implementation of the next stages research.

