

Action Research To Innovate Science Teaching

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Aim: To raise students' motivation towards scientific subjects (Chemistry)

# Cycle one

#### Cycle two

### I have planned and implemented:

- Creating the focus group
- Filling and analyzing the pre-questionnaire
- Students' visit in the wine factory twice
- Experimental lesson
- Filling and analyzing the post questionnaire
- Keeping the observations diary

# **Observation results:**

Diagram 1 Pre-questionnaire results Diagram 2 Post-questionnaire results

Natural science is interesting

will use my knowledge practically

The topics have a social meaning

Natural science subjects help me choose

A lot of technicians are the strength of

Industrial development is the strength of

I like chemistry

my profession

the country

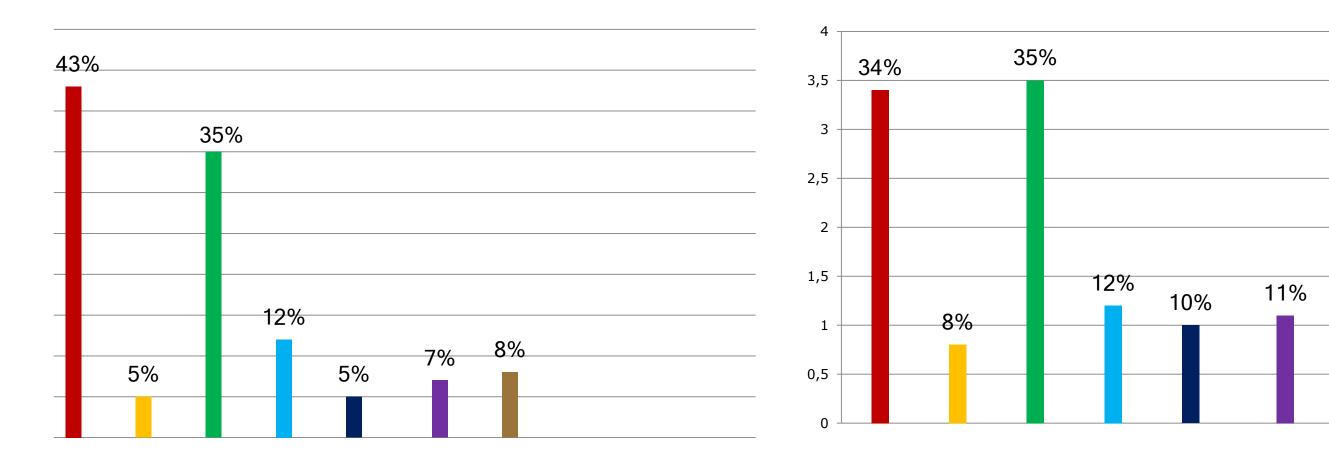
the country

15%

# I have planned and implemented:

Creating of the focus group
Students' two visits at the Chemist's
Practical work #1.(Making hygienic soap on grape seed oil)
Students' two visits at the Chemist's "Crystal"
Practical work #2(Making cosmetic ointment on grape seed oil)
Internal school conference
Students' survey and analysis
Maintaining Observation diary

# **Observation results:**



Natural sciences are interesting

I like chemistry

I will use my knowledge practically

The topics have a social meaning

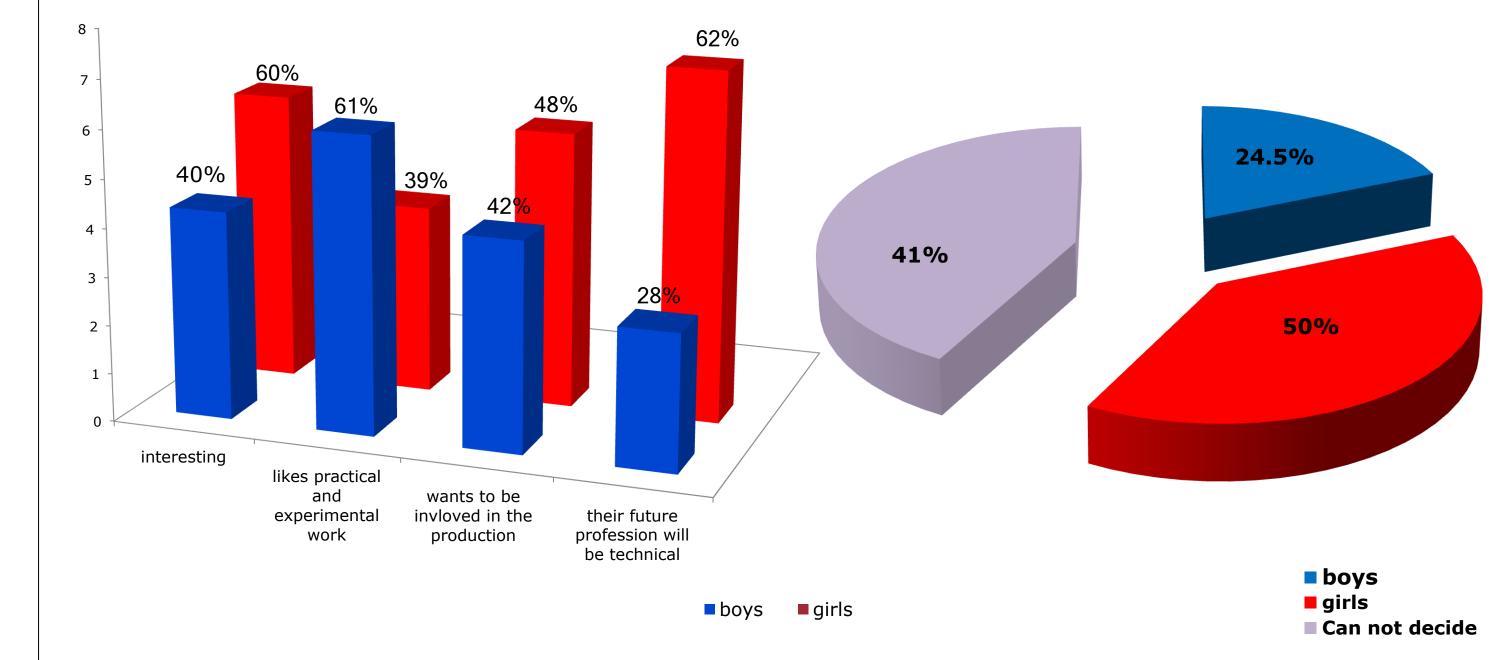
- Natural science subjects help me to choose my profession
- A lot of technicians are the strength of the country
- Industrial development is the strength of the country

#### Analysis of questionnaires :

As a result of post- questionnaire analysis around 25% of 12 students decided to choose The Grape Processing Technology as a profession.

#### Diagram 3 Survey results

#### Diagram 4 Motivation raising



#### Summary:

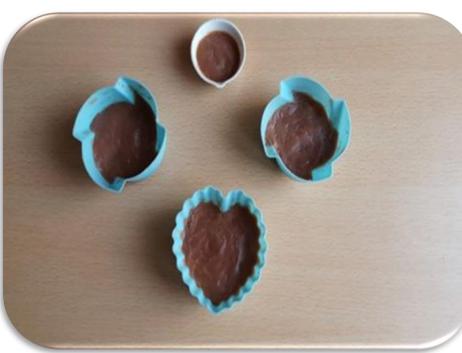
17 students (10 girls and 7 boys) took part in the project. In the course of the project, gender thinking was revealed. Girls and boys had different interests towards the activities carried out. In terms of raising motivation I got a different result. As a result of the analysis, motivation was increased in 50% of girls and 24,5% of boys. 41% of the total number of students have not decided yet.

















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