

## Action Research To Innovate Science Teaching

School- Telavi European school  
Class- XI  
Subject - Chemistry

Teacher- Darejan Margalitashvili  
E-mail : [margalitashvili.d58@gmail.com](mailto:margalitashvili.d58@gmail.com)  
Partner Companies:  
LTD "Schuchmann Wines Georgia"  
LTD Pharmacy- "Crystal"

**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

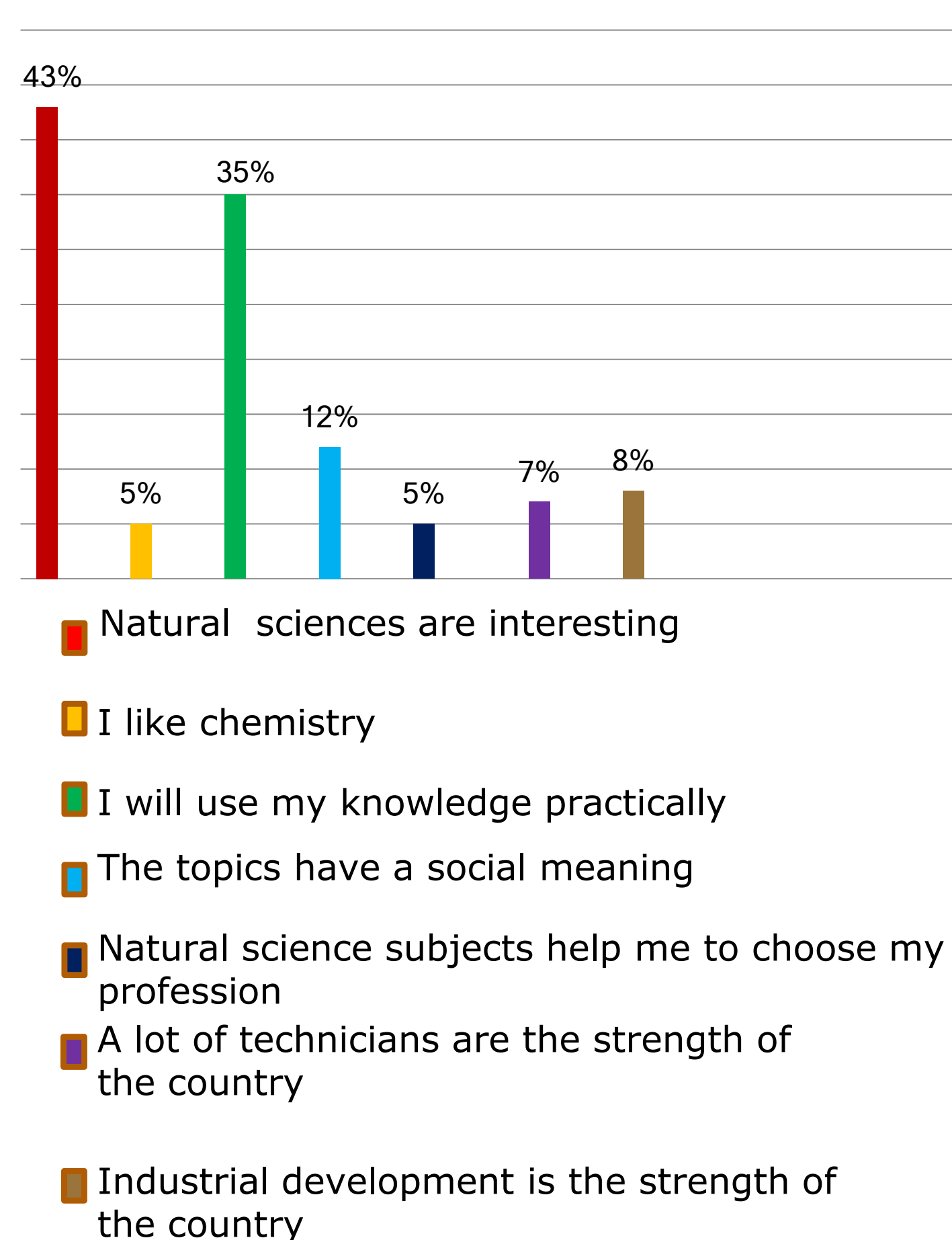
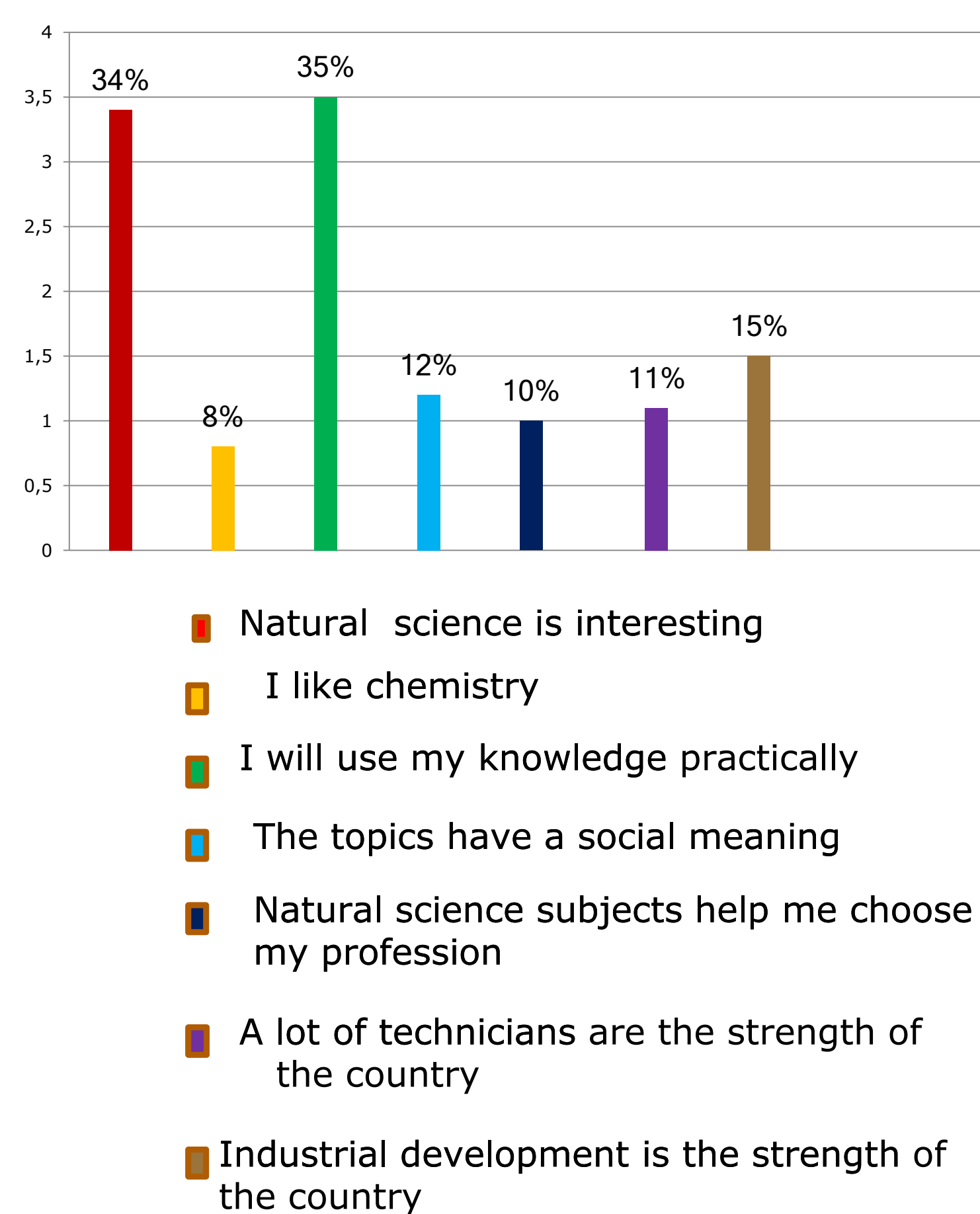


Diagram 2  
Post-questionnaire results



### 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.



### 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:

Diagram 3  
Survey results

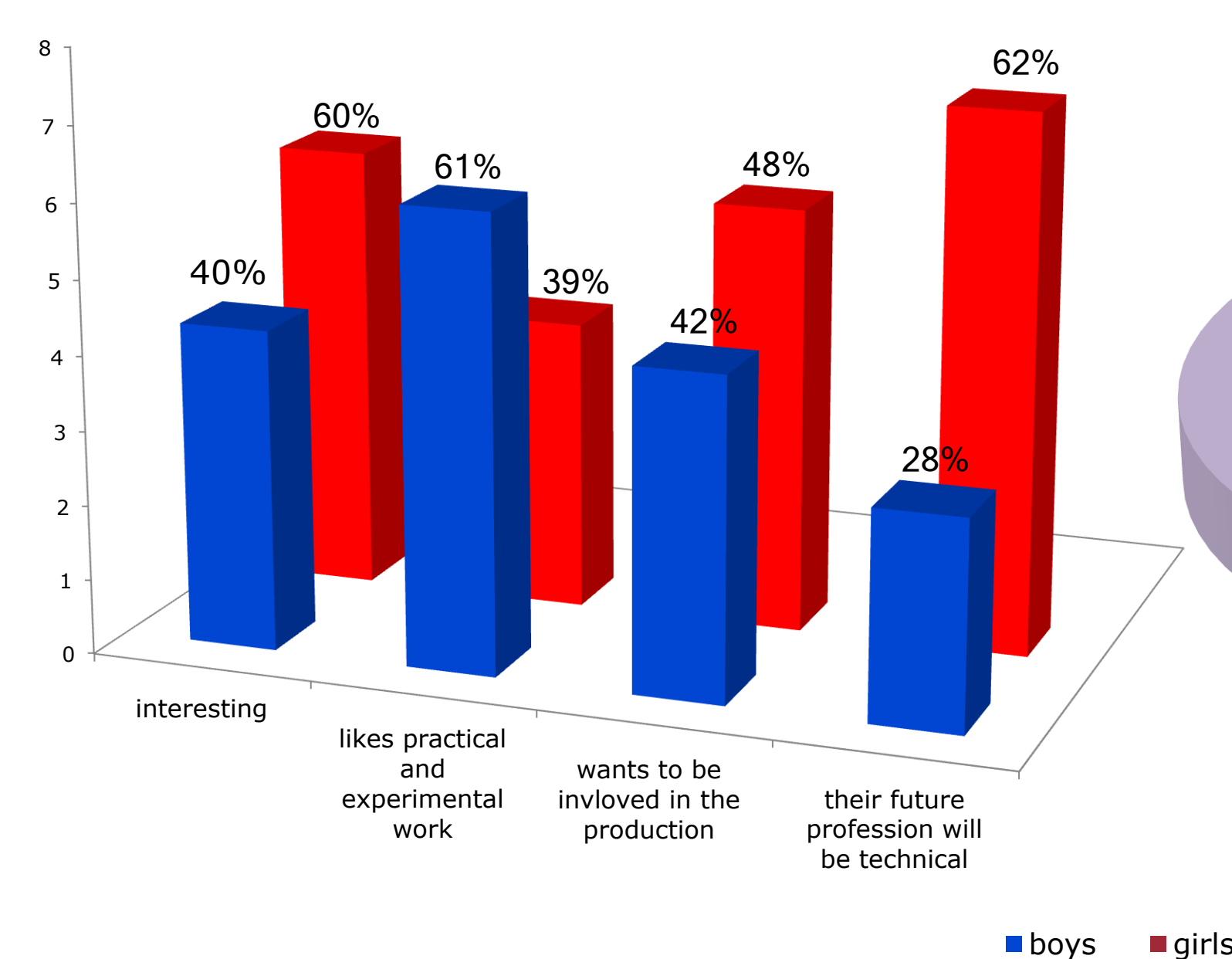
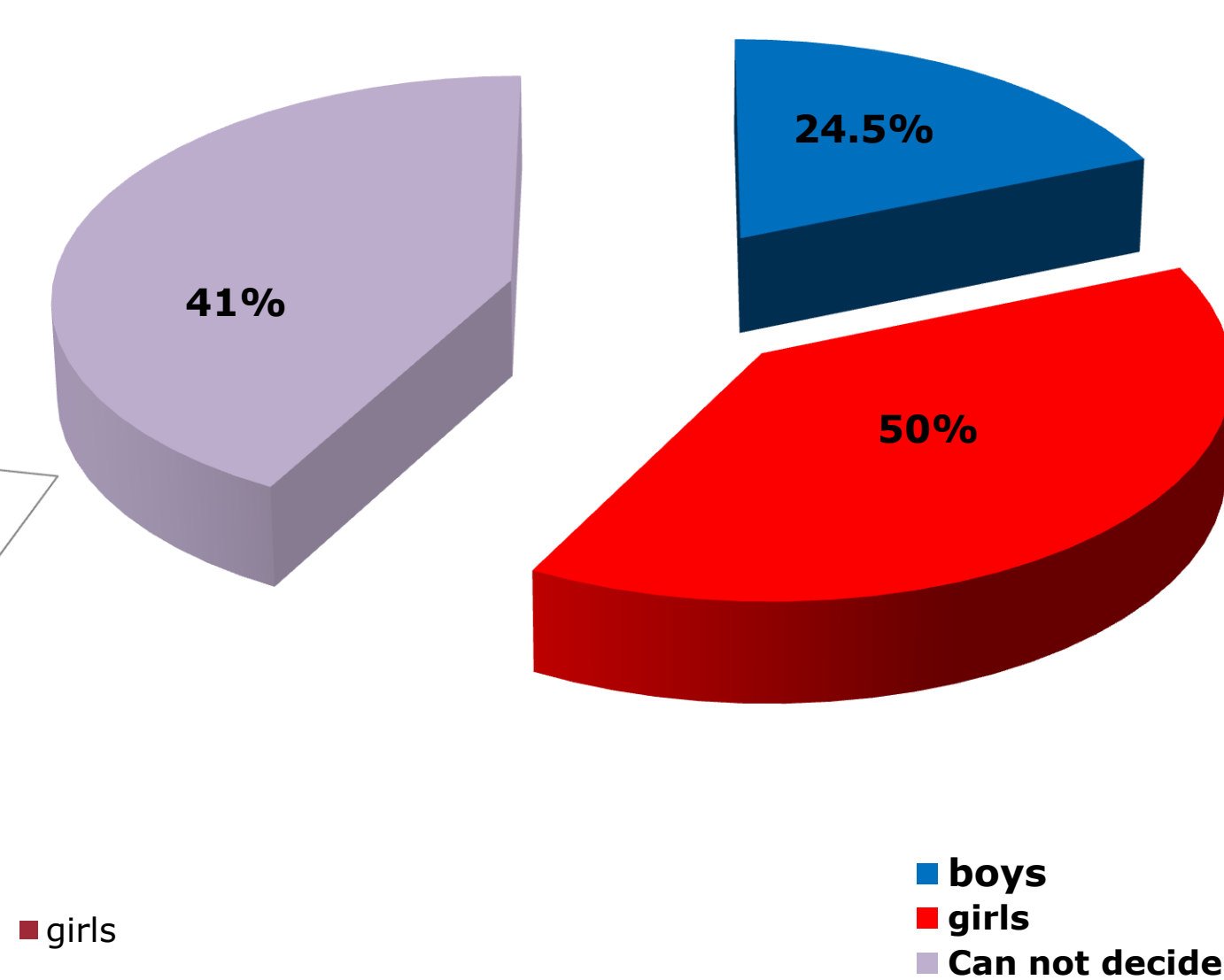


Diagram 4  
Motivation raising



### 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.

