

How to improve students' entrepreneurial skills with the help of science

როგორ განვავითაროთ მოსწავლეებში სამეწარმეო უნარ-ჩვევები და ავამაღლოთ სწავლის მოტივაცია .

Practical experiment for promotion of teaching natural science

My goal:

- Raise motivation of natural subjects in students
- Improving of knowledge level in these points: filtration, concentration, fermentation, sterilization, pasteurization, grafting, vegetable multiplication-access in depth.
- Acquiring of industrial skills, helping how to choose profession, forming successful humans are the main goal. (To make business plans).

Action:

- Asking argumentative questions and discussion.
- Founding information with different methods in advance; with the help of the internet, interaction, interview with enterprise head.
- Teaching physical and chemical processes in depth while making apple juice and vinegar. Taking experiments with students of different kinds of apples while making juice, PH, glucose, tasteful and chemical contents.
- Detecting factors affecting apple juice quality



Reflection:

Practical exercises should be conducted more often to increase motivation and practical skills. It is necessary to be taken children to the factories to get involved in these processes.

Planning:

Complete practical works gradually. (separate lessons, laboratory experiments, mathematical computation, fermentation, pasteurization)



Ilia State University

School name: Village Kvemo Sobisi public school

Teacher: Tamar Beridze

Subject: Biology, Chemistry

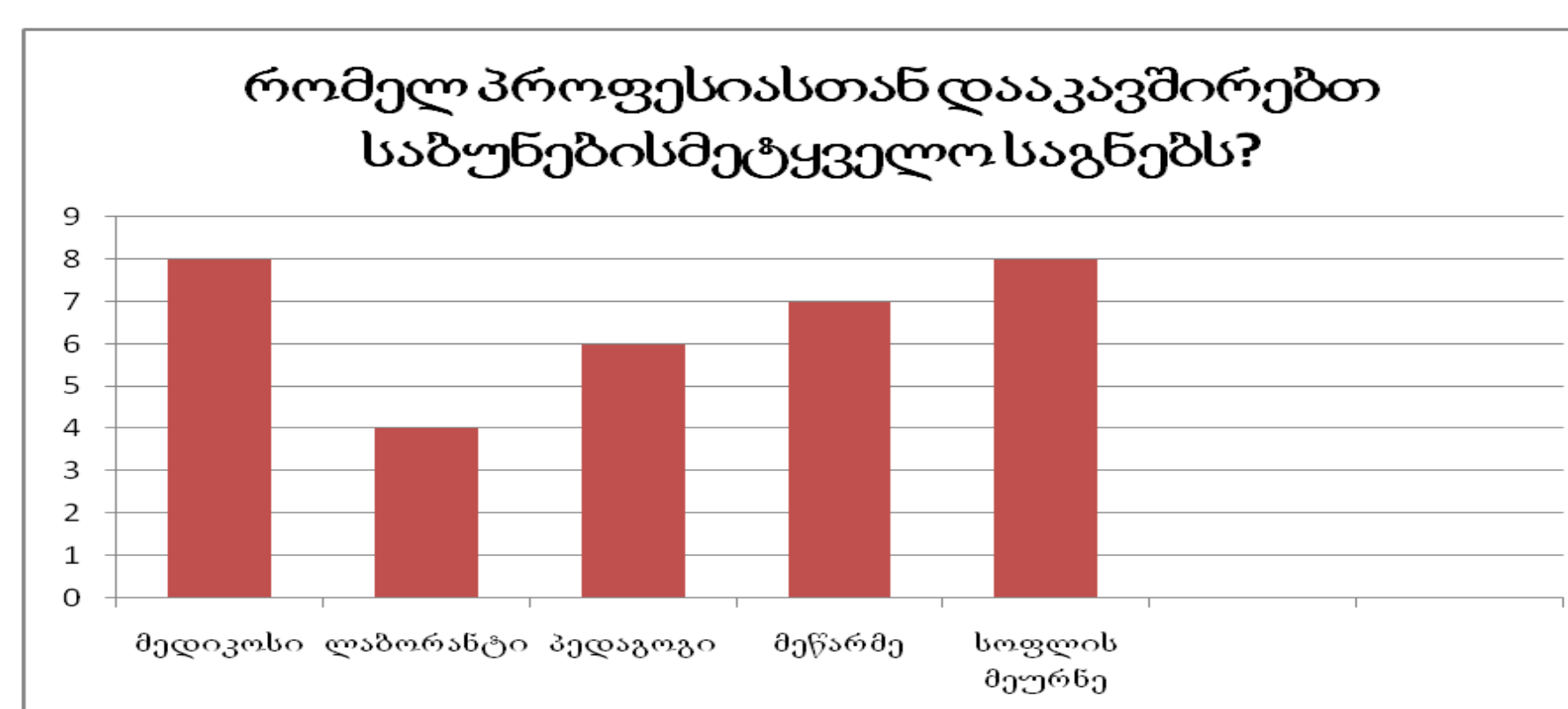
Grade: 8-9

Partner enterprise:

Social enterprise „Sobissuri”

Observation:

- **Focused observation** during the experiment. (The lack of practical skills)
- **Interview with parents.** (Less motivation for natural subjects.)
- **Pre questionnaire in pupils about interest in natural science.** (however, they believe that their future plans are not to be chosen natural science subjects.



Critical friend's observation: I have been advised to conduct practical lessons

Action: Visit the enterprise

- Direct participation of pupils in the processes in the enterprise.
- After visiting the project successful business management-planning, creating and advertising business reorganization and expansion business plan.



Observation:

- **Focused observation:** I have a diary of observation about practical skills of pupils. I studied how their motivation and quality of learning had increased.
- **Secondary data analysis:** In order to promote knowledge level of natural sciences more diverse activities are required.



Planning:

- The subsequent activity will be planned in the sixth grade and I will show pupils how to become successful agricultural farmers.
- Interview with agronomist and his master class holding in grafting.

Reflection:

- The visit to the factory showed that students had more interest in the study of fermentation, concentration, sterilization and pasteurization processes in details.
- However, you need more practical exercises, personal examples and learning to deepen this interest.

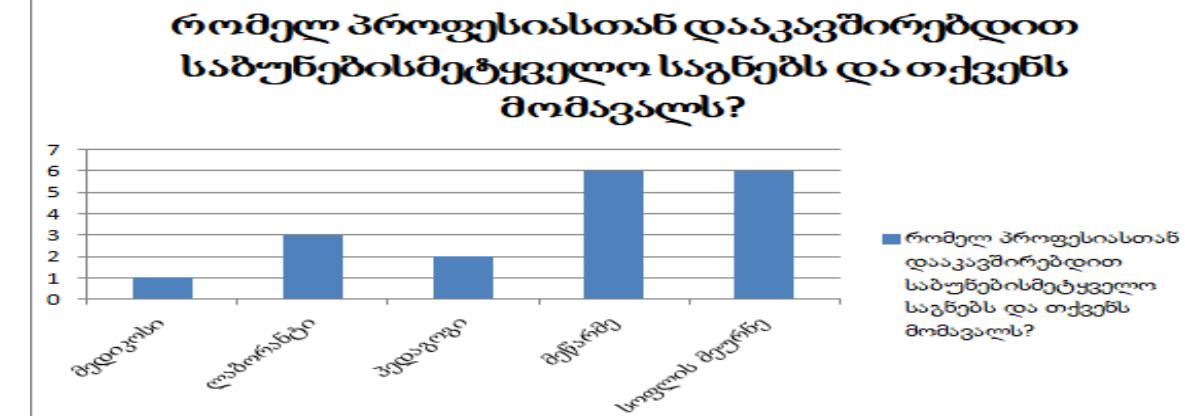
Action:

Visit to agronomist:

- Agronomist conducting master classes, practical work, acquaintance of the types of grafting.
- Creating and advertising of business plan.

Observation:

Post questionnaire



Reflection:

- As a result of the project, motivation and a level of knowledge in pupils are raised in natural sciences.
- Entrepreneurship skills in pupils have increased. I helped them to choose a profession and become successful people.

Conclusion:

Increasing motivation in science subjects and improving the level of knowledge facilitates projects, giving lessons in non-traditional situations, personal examples help children to choose future professions.

