

## TEMPLATE for BEST PRACTICE EXAMPLES - SOLVED TASK



1. Name of the task:

**Potato starch glue making.**

2. Why did you choose this task?

Experiential education for preschool children provides an opportunity to create, discover and perceive surrounding world. Experiential education emphasizes the importance of the educational process, not the outcome. We chose this task because we believe that the production of glue from starch is an experimental, never-before-tried activity that will interest our children and provide them new experiences.

3. Subjects covered from STEAM areas:

Natural sciences, technology, engineering, arts, mathematics.

4. Target group (age range and size of the group):

Preschool age group (6-7 years). The task was completed by 6 students (there are 20 pupils in the group, but many of them were ill at this time).

5. Duration of the activity:

The whole process took about a 1 hour.

6. Key words:

Potatoes; starch; glue; taste/flavour properties.

7. Key sentence describing context of the activity, followed by short description (200 words):  
Children squeezed the juices of various vegetables and learnt their external and taste properties; afterwards, the children made glue from starch and crafted little artwork.

The children squeezed the juice, tasted them, analyzed the taste. Then they waited 10 minutes and watched what would happen with the juice next. The children discovered potato starch and made glue from it. Finally, they created a work of art and watched for the glue not to come off.

8. Description of the activity environment, including the list of materials and tools needed:

Activities took place in a group, no special environmental preparation was required. Tools used: table, juicer, vegetables (cucumber, carrots, beets, potatoes), cups, plates, water (warm, cold, hot), spoon, sheets of white paper, colored paper, brushes, hourglass.

9. Step by step, detailed description of the activity, including teaching and learning strategies:

Process description: after preparing all the necessary tools, the students squeezed the juice of each vegetable, tasted it, analyzed juice flavours, discussed which juices were the most delicious and which were not. Then they waited 10 minutes with the help of an hourglass and then observed

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what had happened to the juice of each kind after that time. When pouring the juice from the cups, it was noticed that after pouring the cucumber, carrot and beet juice in the cups, nothing remained on the bottom, and when the potato juice settled, there was potato starch left. The children noticed that it was a viscous and tasteless substance. Next step: water of different temperatures (cold, warm and hot) was poured into the starch, mixed and observed what would happen in each case. The children realized that the glue was only obtained by adding a little hot water and mixing well. Finally, they created a work of art with the available glue by gluing colored paper, and then checked if the paper had come off or remained stuck together because of the glue.

Methods used: collaborative activities.

### 10. Learning objectives/competencies:

After squeezing the juices of various vegetables and knowing their external and taste properties, students will be able to make glue from starch and create a work of art. The following competencies were integrated during the activity: communication, artistic, social, healthcare and cognition

### 11. Evaluation/Assessment guidelines:

After concluding the activity children discussed the activities that took place, the contribution of each child and the results of the process.

### 12. Lessons learned:

These experiential activities provided students with a new and exciting knowledge. After learning how to make their own glue, kids told family members at home about the activity. Also, some of kids made glue at home with their parents to prove the parents that it was possible to make a strong paper glue out of potatoes.

### 13. Additional information/Links: [https://youtu.be/cvw\\_zBz1s78](https://youtu.be/cvw_zBz1s78)

### 14. Contact person: Lina Tamošaitytė and Jurgita Krasnickaitė-Saulėnienė.