TEMPLATE for BEST PRACTICE EXAMPLES - SOLVED TASK

- 1. Name of the task: TO CREATE A SAILBOAT AND TO FIND OUT WHAT SIZE AND SHAPE OF SAILS WILL HELP THE BOAT SAIL FASTER
- 2. Why did you choose this task? This task was suitable for preschoolers. Also we want to find out can our pupils to create boats and to find the ways how to make boats sail.
- 3. Subjects covered from STEAM areas: Natural sciences, mathematics, engineering.
- 4. Target group (age range and size of the group): Preschool children. 8 participants.
- 5. Duration of the activity: The duration of the workshop is 40 min.
- 6. Key words: Engineering, sources of energy.
- 7. Key sentence describing context of the activity, followed by short description (200 words): We had the task to create sailboat and to find three sources of energy, which help the boat to move faster. It was interesting activity, because children find out that a breath of exhaled air from the children's mouths is the slowest way to move, but motor can help the boat to move very fast. This activity helped to improve children's critical thinking, problem-solving and creativity skills. Also was wonderful that all kid gets one engineering challenge but decisions were different. It shows that each child thinks in his / her way, choosing his / her creative path.
- 8. Description of the activity environment, including the list of materials and tools needed: sticks, plasticine, water, bowl, hair dryer, motor. The activity could be done indoor and outdoor.
- 9. Step by step, detailed description of the activity, including teaching and learning strategies: At the beginning of the activity, we talked to the children about a boat, what it looks like, and what it must be. We offered the students to construct their boats from tree branches and plasticine. We invited the children to check if their boats could sail or not. After checking if the boats were sailing, we asked the children what helps the boat sail. The children's answers were two: wind and a motor. Then we chose three sources of energy to sail the boats: a breath of exhaled air from the children's mouths, a stream of warm air from the hairdryer, and a motor. The children were asked to count how many seconds it takes for the boat to cross from one side of the bowl to the other. The results we marked on the chart. At the end of the workshop, we made with the children the conclusion of which source of energy made the boat move the fastest and which the slowest.
- 10. Learning objectives/competencies: The aim is to design the boat and check which energy source makes the boat move the fastest. There are developed such children's competencies as critical thinking, problem-solving, and creativity.
- 11. Evaluation/Assessment guidelines: The results of the STEAM challenge were marked on the chart. The chart was analysed with the children and conclusions were drawn about what

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the boat needed to sail, which source of energy made it move the fastest and which was the slowest.

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- 12. Lessons learned: It was interesting to observe that after receiving the same challenge to construct a boat that would sail, the children constructed it in different ways. It shows that each child thinks in his / her way, choosing his / her creative path. It was amazing to see that they already know what can make a boat move.
- 13. Additional information/Links: https://youtu.be/TK5dcJEMuxA
- 14. Contact person: Šiauliai Kindergarten "Pasaka", educators Jolita Jasulaitytė, Mireta Visockienė, Laura Bajoriūnė, e-mail <u>laura850630@gmail.com</u>