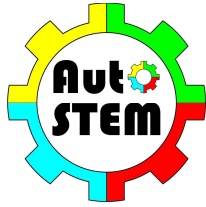


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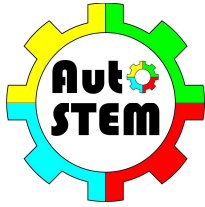
## AutoSTEM lesson plan example 6

<i>Title of your project lesson</i>	<b>The dance of dolls and the human body</b>
<i>The Children</i> <ul style="list-style-type: none"> <li>• Age</li> <li>• Number</li> </ul>	<i>9 years (3<sup>rd</sup> grade)</i>  <i>27 students</i>
<i>Learning Objectives</i>	<ul style="list-style-type: none"> <li>• Formation of knowledge about the energy transfer from the manual rotation of the handle in the movement of the doll</li> <li>• Development of engineering competencies for analysis and construction</li> <li>• Assimilation of mathematical concepts</li> <li>• Formation of new knowledge about the parts of the human body</li> <li>• Development of the interdisciplinary connections of technology with mathematics and nature</li> <li>• Development of creative abilities</li> </ul>
<i>Automata to be constructed</i>	The Dancing Doll
<i>Resources</i>	Coloured paper, scissors, cardboard, cardboard boxes, pencils, felt-tip pens, wooden skewers, cone template, mechanism box, long wooden sticks, drinking straws, glue stick or hot glue gun
<i>Cross-curricular links</i>	Mathematics, natural science, art
<i>STEM content</i>	Development of the scientific concepts movement, mechanism, construction, and energy



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<p><i>The script</i></p> <p><i>Expected project results</i></p>	<p>The scenario is described in the course of the lesson.</p> <ul style="list-style-type: none"> <li>• acquiring new knowledge about our environment</li> <li>• consolidation of already acquired knowledge</li> <li>• formation of new skills for making the given product</li> <li>• dramatisation and inventing scenes with them</li> <li>• science</li> </ul>
<p><i>Activity description, plan</i></p>	<ol style="list-style-type: none"> <li>1. Observation of dancing dolls:             <ol style="list-style-type: none"> <li>a. Videos of already made ones are shown <a href="https://youtu.be/1tldldgBPo">https://youtu.be/ 1tldldgBPo</a></li> </ol> </li> <li>2. Research, analysis and discussion:             <ol style="list-style-type: none"> <li>a. Here the children have to tell what impressed them,</li> <li>b. how they think these dolls are moving,</li> <li>c. what they can and cannot explain.</li> <li>d. Here they ask their questions accordingly</li> </ol> </li> <li>3. Explanation             <ol style="list-style-type: none"> <li>a. Here I explain what the stages of construction of the doll are</li> </ol> </li> <li>4. Teamwork</li> <li>5. Demonstration of the made dolls and dramatisation with them</li> </ol>
<p><i>Criteria for assessment and self-assessment</i></p>	<ol style="list-style-type: none"> <li>1. Criteria for analysis of the results             <ol style="list-style-type: none"> <li>a. Creativity and innovation</li> <li>b. Critical thinking and problem solving</li> <li>c. Their application in our lives</li> <li>d. Knowledge of the content</li> </ol> </li> <li>2. Assessment and self-assessment             <ol style="list-style-type: none"> <li>a. Teacher assessment</li> <li>b. Team evaluation for other teams</li> <li>c. Self-assessment</li> </ol> </li> </ol>



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## Educational part:

- Updating knowledge
- What life processes do you know?
- What are the parts of the human body?
- Let's look at a picture of a robot.
- What does a person look like, and how does he differ from a robot?

## Setting the topic “The dance of dolls and the human body”

- The children look at a model of a dancing doll.
- Following is a discussion on how it can work.
- The teacher gives guidelines for the friction of the wheels and their drive.
- The different parts of the doll are analysed. The cone body of the doll is described. We recall from the subject “Man and Nature” the types of limbs.
- In connection with environmental protection, students give ideas for collecting discarded caps and paper.
- When assembling the mechanism, children also show creativity connected with the doll's appearance - eyes, nose, mouth, hair and dress.

