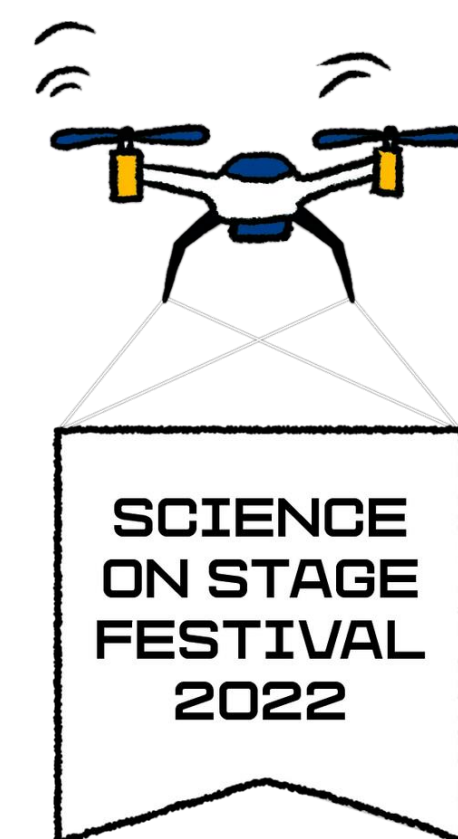


STEM WITH ARTS



Marine Bagalishvili | 145th Public School | Tbilisi | Georgia

In The Footsteps of Traditions



Project idea: Restore the forgotten tradition of dyeing with vegetable dyes.

Why should we use natural dyes made from plants and lichens?

- They are non-toxic;
- Gives a sustainable color that does not fade in the sun and during washing;
- It is possible to get many different tones of the same color;
- Can withstand centuries.

Problem:

- In almost every field, even in the confectionery industry, we use synthetic dyes that are toxic and cause cancer;
- There are ancient and diverse traditions of making and using natural dyes in Georgia, which are forgotten;
- Georgia is distinguished by the diversity of plants and therefore there is a great opportunity to get natural dyes of different colors, which are practically untapped.

Project Research Questions:

- Do the colors of different materials painted with the same paint differs from each other?
- Do the colors of different materials painted with the same paint differs from each other in the case of using different fixatives?

Project activities:

1. Finding and processing the necessary literature; 2. Virtual tour of the Georgian Silk Museum; 3. Development of simple technology for dyeing plants; 4. Wool processing; 5. Preparation of dyes and several substance for fixation; 6. Dyeing wool and bandage cloth (cotton) in different dyes and with the addition of different substances; 7. Analyze research results and make conclusions; 8. Creating a felt composition from dyed wool and preparing an exhibition stand; 9. Organizing a school conference and presenting the work done to the school community;



Project results:

1. Cotton and wool are dyed in different colors in the same dye, and the same material - wool is dyed in completely different colors with one dye, but with the addition of different substances; 2. Students got acquainted with the methods and traditions of using natural dyes in Georgia and developed a simple dyeing technology; 3. With the obtained colored wool, the students learned and created a felt composition as well as an exhibition stand; 4. The works created by the students and the school conference held by them will help to restore the forgotten traditions of using natural dyes in Georgia.

In our opinion we offer teachers a fun and exciting low-budget project that can be implemented in all school labs.

