Symmetry through traditional Cretan dance "Sousta"

A LESSON PLAN by Artemis Choreftaki and Konstantinos Manolakis Mavromataki Private School

Grade 5-6

General Information about the resource:

The specific lesson plan includes the educational activities that took place in the context of the meeting in Sweden with Greek, Swedish and Cypriot students, who are in the 5th and 6th grade of the Primary School. What was sought during the planning of the action, was the connection of the traditional Cretan dance of Sousta with the rotational or radial symmetry, which is formed by the bodies of the dancers during this dance. The activities carried out include the teaching of the Sousta dance, the teaching of symmetry and the creative expression of the students through dance in the context of cooperative teaching.

Keywords: rotational symmetry, radial symmetry, Cretan dance, Sousta

Further notes about the resource and its use:

- 1. **Cognitive objective:** Students in an experiential way come into contact and are able to recognize rotational symmetry and distinguish it from reflection symmetry.
- 2. **Prior knowledge:** If we are addressing students in higher classes of Primary school, we expect them to know the concept of symmetry, but not necessarily its various types.
- 3. **Material and technical infrastructure:** Computer with internet access, projector, blackboard, spacious room.
- 4. Time: One teaching period (45 minutes)

Application:

We start with a motivational activity, get into pairs and play the mirror game. Where the children of each pair will alternately take on the role of the mirror learning reflection symmetry. (~5 minutes)

We continue by talking about the Cretan Sousta dance, which is similar to the game we just played, since the dancers are facing each other. We can show the corresponding video: <u>https://www.youtube.com/watch?v=mvBYT-41WuQ</u>

At this point we encourage the children to learn the basic steps of Sousta together, which is a very simple dance, consisting of just three steps with the feet going alternately. (~10 minutes)

After mastering the basic step, we can also practice some other dance moves to embellish our dance. The dance moves in Sousta are almost always danced in pairs, so we can go back to the pairs we had in the first activity or form new ones. For practical reasons, it is suggested to form two lines, where each child will be opposite his/her partner.



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Some extra dance moves we can practice are the encounter (meeting), the hook and the window, during which we always move with the basic step. We are now trying to practice the dance moves with the music. <u>https://www.youtube.com/watch?v=BVqiWukeOA4</u> (~10 minutes)

At this point, we make the connection to mathematical concepts. With a short lecture, we seek to explain to the students, rotational symmetry (180 degrees) that we form with our bodies when we do the dance moves and compare it with the reflection symmetry. <u>Reflectional Symmetry and Rotational Symmetry | Don't Memorize</u>

We can ask a pair of students to do the dance moves slowly and with pauses, so that together we can identify and explain the symmetries that are formed. We repeat as many times as necessary, if we want with a different pair. (~10 minutes)

As a final activity, we allow some time for each pair to work alone and create their own dance move, which may contain some symmetry of their choice. We conclude by presenting each pair's dance move to the rest of the class. (~10 minutes)

Reference:

Παρούτσας, Δ., Κ., (2002), Οι ελληνικοί παραδοσιακοί χοροί κατά περιοχές: Κρήτη - Σούστα, available at <u>https://paroutsas.jmc.gr/dances/crete/sous-cre.htm</u>

