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Good practices
ARTS_308BC_EN

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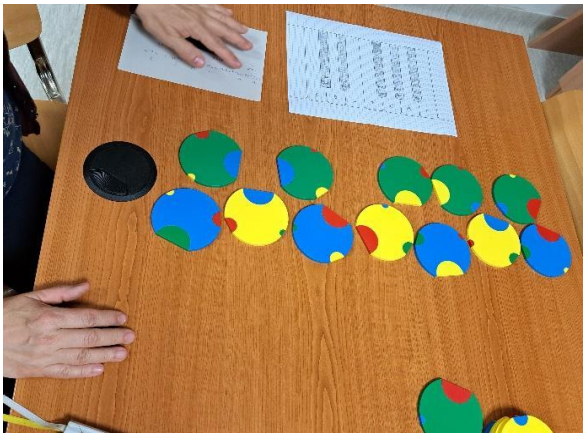
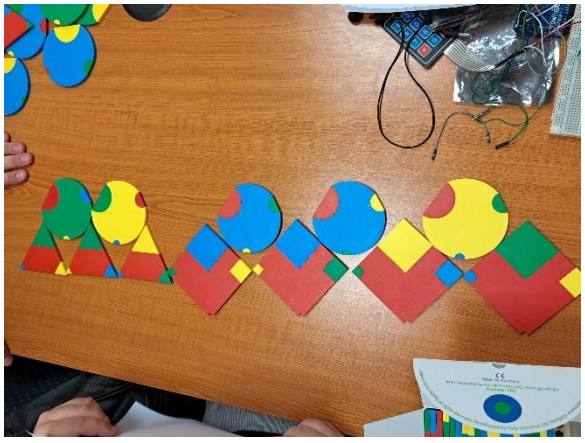
Description of the problem / exercise: **Music notes from Poly-Universe elements**

Used sets: all 3 different shapes. Students are divided into pairs of 2 people. Everyone gets a picture of an octave-sized piano keyboard with ABC sounds, and 1-1 boxes of each of the three Poly-Universe games. Their first task is to display the ABC sounds in sequence from the Poly-Universe elements according to some system and structure, and note or photograph it, but the rest of the pairs cannot see it. Once they have this, they confuse all the Poly-Universe elements they have used. Each pair is given 2 beats from a folk song and a paper with the 5-line system depicted on it. They have to lay out their 2 beats on the sheet with their ABC sounds constructed from the Poly-Universe elements. Another pair takes a photo of it, and gets the two beats the pair displayed, and they have to figure out how the piano's ABC notes were originally encoded. Thus, each pair encoded the ABC sounds once, and then some of them were displayed, which required another pair to decode it.

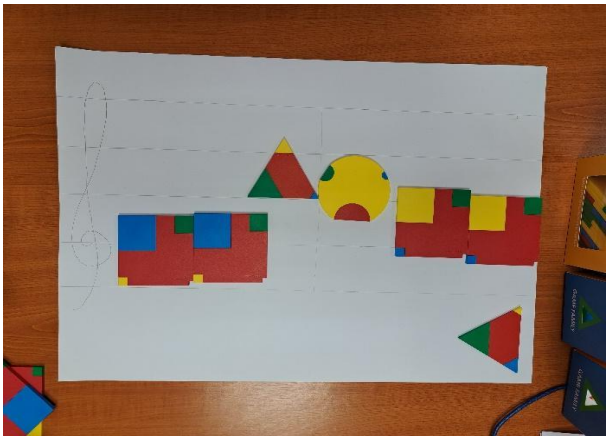
Coding of the first pair



Coding of the second pair

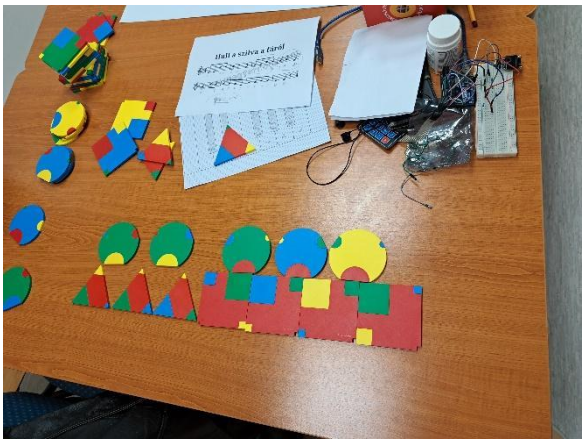


Coding of the third pair



Representing in the 5-line system.

The 2 beats of the folk song



Attempt to decode

- *Why this exercise is good: it improves logical ability, it is also good for developing structured thinking, coding and decoding.*
- *Which level is recommended: Upper elementary and secondary school (but can also work at higher education).*
- *School subject(s): Mathematics, music*
- *Comments: Some pictures about the implementation.*