

Good practices INCL_402AB_EN

Author's name and institution: **Branko Anđić, Zsolt Lavicza, Eva Ulbrich**

School of Education, Department of STEM Education, Johannes Kepler University, Linz, Austria

Description of the problem / exercise: **Combinatorics with 'repeat' technique**

In order for students with disabilities to have the opportunity to practice combinatorics and orientation, teachers can use Poly-University with the 'repeat' technique. Implementation of this teaching technique requires students to repeat the sequence given as a model. For the first few times, the student arranges the figures according to the model, and then – if the student's abilities allow it – without observing the model. When adapting the teaching content to the student, the teacher can use only pictures, and can use a combination of pictures and words (depending on the student's abilities). One example is given in the picture below.

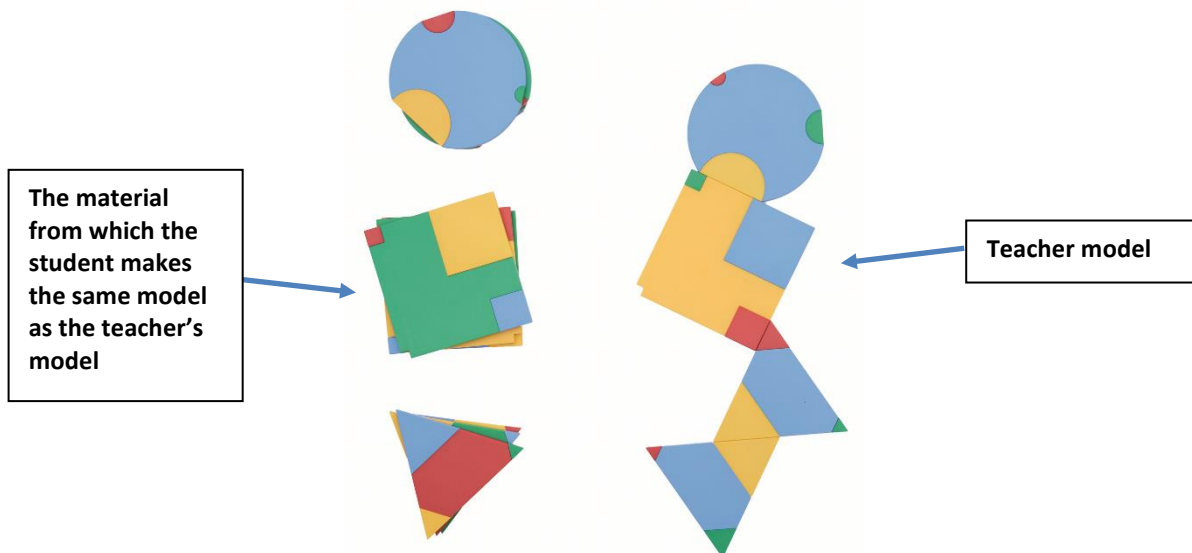


Figure 1

- *Why this exercise is good:* This exercise provides practical activities to the students with disabilities and contributes to their knowledge in recognizing the shapes around them, develops students' combinatorial abilities as *well as their ability to notice details*.
- *Level of teacher training:* Elementary school
- *School subject(s):* Math, art
- *Comments:* This exercise is dedicated to the students with cognitive disabilities, but with some modification could be usable for students with other disabilities as well. The teacher should always first create a simple model and only after that more complex ones, according to the abilities of the students.