

**ZMATH 2016f.00724**

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**A suggestion for a differentiated presentation and feedback method (DIAM) for the spatial orientation test (SOT).**

J. Geom. Graph. 20, No. 1, 127-145 (2016).

Summary: The test battery of the spatial ability research project ‘GeodiKon’ consisted mainly of four spatial ability tests: Three Dimensional Cube Test, Differential Aptitude Test, Mental Rotation Test, and Spatial Orientation Test (SOT). The results of the analyses of the SOT will be compactly summarized and visualized (average deviation, pointing accuracy and pointing direction and gender effects). The analyses of the data of the SOT brings up three challenging aspects: 1) We had the goal to provide a sufficiently helpful and meaningful feedback to test persons. 2) The very large deviations from the correct solution angle compared to other research projects motivated for deeper analyses. 3) The analyses of the data show the fact, that students solve the tasks of the SOT within two different steps. The first step is to locate the solution angle in the correct quadrant/semicircle and the second step is to place the best possible solution angle. These three aspects motivated to develop the differentiated presentation and feedback method DIAM, which is introduced in this paper. The two steps of the differentiated presentation and feedback method DIAM are ordered in accordance to the chronological considerations of test persons.

*Classification:* D60 G20 C40

*Keywords:* spatial ability; spatial orientation

<http://www.heldermann.de/JGG/JGG20/JGG201/jgg20011.htm>