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An unusual polyhedron in students' mathematical education

Line segments contained in the boundary of faces of a polyhedron and not containing other vertices, except their ends, are called the "edges" of this polyhedron (see [1]). In school mathematical education, a student has to deal with some examples of polyhedra, such as prisms and pyramids (see [2]). However, the concept of a polyhedron and the related definition of its edges, vertices and faces are not fully understood by students (see [3]). My presentation contains an example of a polyhedron and related research concerning the problem of how students perceived the notions of the edges and vertices of polyhedra.

[1] Waliszewski, W. (red.) (1997). Encyklopedia Szkolna Matematyka. Warszawa: WSiP.

[2] Kłaczkow K., Kurczab M., Świda E. (2005). Matematyka: podręcznik do liceów i techników. Klasa 3. Część 1. Zakres podstawowy i rozszerzony. Warszawa: Oficyna Edukacyjna Pazdro.

[3] Lakatos, I. (2005). Dowody i refutacje. Logika odkrycia matematycznego. Warszawa: TIKKUN.

Keywords: mathematical education, geometry, mathematical understanding