Cross sections of stratovolcanoes drawn by sixth grader

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Experiment on Polygenetic stratovolcano using waste food oils and colored sands was demonstrated to sixth grader in country school at Yohohama. The cross sections of stratovolcano were drawn by children, before experiment and after experiment. These pictures were divided into 4 types by inner stratigraphy. Textbook type was consisted by piled similar triangles. Parallel type was consisted by horizontal lines. Revers type was consisted by V shaped lines. Experiment type was consisted by gradual change from lower horizontal lines to upper triangle, that was found in this experimental stratovolcanoes. Before experiment, imagination sectional views were divided into 3 types; text type (42%), parallel type (50%) and reverse type (8%). After experiment, the greatest change was that simple liner lines were reduced and complicated curves were increased in the cross sections (84%). But drawing details of real cross sections was thought to be difficult for sixth grader, experimental type was 21%. Parallel type was still 56%, but text type was reduced to 23%. The reason why parallel type was still remained was thought to be that almost of the example pictures of stratum were parallel in textbook of grade-school. Therefore school-graders tended to catch the image of the parallel layers in the lower part of the experimental storatovolcano.

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