

**ZMATH 2016d.00709**

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**Analysis of the role of learning of equation in the formation and structure of the general mathematical view in Japan – a strategy to reconstruct of mathematics education.**

Rogerson, Alan (ed.), The mathematics education for the future project. Proceedings of the 13th international conference ‘Mathematics education in a connected world’, Catania, Sicily, Italy, September 16–21, 2015. Münster: WTM-Verlag (ISBN 978-3-942197-44-1/pbk; 978-3-942197-86-1/ebook). Conference Proceedings in Mathematics Education 1, 359-363 (2015).

Summary: Algebra usually having been regarded as the most basic mathematical method to be learned by all young high school students, now is sometimes a serious obstacle of learning of mathematics in Japan, which disturbs ordinary students to learn further mathematical concepts like functions. It is indispensable to spend the necessary cost, i.e. teaching time and teaching efforts, for modern learners to be well convinced of the advantage of algebraic thinking beyond mere training of skills of formal manipulation of mathematical expressions. Traditional too much exceeded inclination for the universal validity of mathematical formula for roots of quadratic equation, for example, should be critically reconsidered in view of the contribution to the theory of algebraic equations by J. L. Lagrange.

*Classification:* H33

*Keywords:* algebra; obstacle; mathematical concepts; algebraic thinking; mathematical expressions; roots of quadratic equations; algebraic equations