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**History, application, and philosophy of mathematics in mathematics education: accessing and assessing students' overview and judgment.**

Cho, Sung Je (ed.), Selected regular lectures from the 12th international congress on mathematical education, ICME 12, Seoul, Korea, July 8–15, 2012. Cham: Springer (ISBN 978-3-319-17186-9/hbk; 978-3-319-17187-6/ebook). 383-404 (2015).

Summary: The Regular Lecture addresses the three dimensions of history, application, and philosophy of mathematics in the teaching and learning of mathematics. It is discussed how students' overview and judgment – interpreted as 'sets of views' and beliefs about mathematics as a discipline – may be developed and/or changed through teaching activities embracing all three dimensions of history, application, and philosophy. More precisely, an example of such a teaching activity for upper secondary school is described along with a method for both accessing and assessing students' overview and judgment. Examples of data analysis are given based on a concrete implementation of the teaching activity.

*Classification:* A30 D20 C20

*Keywords:* history; applications; philosophy of mathematics; overview; judgment; students' beliefs; views; images of mathematics as a discipline

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