

**ZMATH 2016c.00329**

**Gravemeijer, Koen; Bruin-Muurling, Geeke; Kraemer, Jean-Marie; van Stiphout, Irene**  
**Shortcomings of mathematics education reform in The Netherlands: a paradigm case?**

Math. Think. Learn. 18, No. 1, 25-44 (2016).

Summary: This article offers a reflection on the findings of three PhD studies, in the domains of, respectively, subtraction under 100, fractions, and algebra, which independently of each other showed that Dutch students' proficiency fell short of what might be expected of reform in mathematics education aiming at conceptual understanding. In all three cases, the disappointing results appeared to be caused by a deviation from the original intentions of the reform, resulting from the textbooks' focus on individual tasks. It is suggested that this "task propensity", together with a lack of attention for more advanced conceptual mathematical goals, constitutes a general barrier for mathematics education reform. This observation transcends the realm of textbooks, since more advanced conceptual mathematical understandings are underexposed as curriculum goals. It is argued that to foster successful reform, a conscious effort is needed to counteract task propensity and promote more advanced conceptual mathematical understandings as curriculum goals.

*Classification:* D30 B70 B20 D20 F30 F40 H20 H30

*Keywords:* educational reforms; conceptual understanding; curriculum; arithmetic; fractions; algebra; textbooks; educational goals

doi:10.1080/10986065.2016.1107821