

ZMATH 2013c.00045

Vanpaemel, Geert; De Bock, Dirk; Verschaffel, Lieven

Defining modern mathematics: Willy Servais (1913–1979) and mathematical curriculum reform in Belgium.

Bjarnadóttir, Kristín (ed.) et al., “Dig where you stand” 2. Proceedings of the second “International conference on the history of mathematics education”, New University of Lisbon, Portugal, October 2–5, 2011. Lisbon: UIED, Unidade de Investigação Educação e Desenvolvimento; Caparica: Universidade Nova de Lisboa, Faculdade de Ciência e Tecnologia (ISBN 978-989-97487-2-9/pbk). 485-505 (2012).

Summary: The new math reform which swept Europe in the 1960’s was in a significant way influenced by the Commission Internationale pour l’Étude et l’Amélioration de l’Enseignement des Mathématiques. Since its foundation in 1952 the CIEAEM held annual meetings where mathematicians, logicians and psychologists discussed the direction of the modernization process. Several Belgian mathematicians played a prominent role in the CIEAEM, in particular Willy Servais and Georges Papy. In particular, Papy has been recognized as a leading, if not uncontested, architect of the new mathematical curriculum. Much less is known about Willy Servais, who for more than twenty years acted as secretary of CIEAEM. In this paper we retrace the career of Servais against the background of the mathematical curriculum reform in Belgium. We reconstruct his views on the modernization of the mathematical curriculum, his work on mathematical models and his concern about the cultural role of mathematics in the modern world. Our analysis shows that the need for an abstract, unified mathematics (as expressed in Papy’s work) was not a dominant theme in the early 1950’s debates in Belgium. Much more attention was given to the creation of teaching aids and the introduction of possible new topics such as probability theory, statistics or electrical technology. We further draw attention to the wider issues involved in the reform and the divergent views of mathematicians and school psychologists in Belgium.

Classification: A30 D30

Keywords: modern mathematics; educational reforms; curricula