Geert Vanpaemel, Dirk De Bock

KU Leuven, Belgium geert.vanpaemel@wet.kuleuven.be, dirk.debock@kuleuven.be

New Math, an international movement?

Abstract

In 1986, Bob Moon argued that the New Math reform, which swept mathematics school education in many countries of the world, should not be regarded as one single historical phenomenon. On the contrary, he believed that the developments in Europe and the US showed "patterns of 'parallel' innovation" (Moon, 1986, p. 46). More recently, Christopher J. Phillips has maintained that, notwithstanding many similarities between the European and the American reform agendas, the "American experience of reform was unique" (Phillips, 2015, p. 12). Also Jeremy Kilpatrick (2012) admitted that, although the new math reform manuals and curricula were transported across borders and the new math reform can thus be understood as an international phenomenon, the national character of each school system was clearly revealed in the process.

In this presentation, we will review the arguments proposed by several authors on the question whether there was some sort of international coherent movement, in which common arguments were developed and internal debates were addressed. The focus will be on the early development of the reform movement. In Europe, the debate arose during the mid-1950s within the Commission Internationale pour l'Étude et l'Amélioration de l'Enseignement des Mathématiques (CIEAEM) / International Commission for the Study and Improvement of Mathematics Teaching, an interdisciplinary scholarly community of (academic) mathematicians, logicians, mathematics teachers, philosophers and psychologists (Bernet & Jaquet, 1998). Despite subtle differences between countries (Beckers, 2016), arguments in the European debates were mainly related to a structural view on mathematics, inspired by the French Bourbaki group and 'supported' by the Piagetian theory of cognitive development. The American reform movement emerged around the same time, but was stronger rooted in socio-economical and 'political' motives and from the start driven by the Government: the Sputnik shock was the reason for fundamental curriculum reforms to improve the quality of education in general. Abstract concepts and structures were supposed to prepare young citizens to be able to learn whatever skills that "we don't know [and] may be needed in the years ahead" (Gardner, 1961, p. 35). The European and American points of view, which originated largely independent from each other, were 'confronted' at the Royaumont seminar (1958) and subsequent OECD conferences.

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