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MATCH BETWEEN A PRE-SERVICE ELEMENTARY MATHEMATICS PEDAGOGY MODULE AND THE CONTENT OF ELEMENTARY SCHOOL MATHEMATICS

Yahya Al Zahrani
Umm Al-Qura University, KSA
ymaz1g10@soton.ac.uk

Keith Jones
University of Southampton, UK
d.k.jones@soton.ac.uk

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Research has revealed that there can be a mismatch between what is taught to undergraduate elementary pre-service teachers during their teacher preparation and what they subsequently teach in elementary school mathematics (Greenberg & Walsh, 2008; Sparrow & Frid, 2001). Moreover, there is a need to study the curriculum for teacher preparation because compared with the school curriculum "much less has been written on the professional curriculum for teacher preparation" (Stuart et al, 2000, 493).

To investigate the match between the content of a mathematics pedagogy module (MPM) taught at one major university in Saudi Arabia (KSA) and the content of elementary school mathematics curriculum in KSA, an observation method was developed to investigate how much emphasis during the MPM sessions was given to content topics of the elementary school mathematics curriculum.

The MPM is one of the modules provided for undergraduate pre-service mathematics teachers during the fourth year of their university level preparation program. Each of the nineteen weekly sessions of the MPM is 120 minutes long. Each session covers mathematical teaching skills and techniques in order to enable pre-service elementary mathematics teachers to teach the mathematics curriculum in elementary schools.

Recorded observations were made of all the taught sessions of the MPM. In terms of the four mathematical areas of elementary mathematics school curriculum, that is number, geometry, algebra, and data, this took place during nine of the MPM sessions (out of 19). Data from the observations showed that during the MPM there was heavily emphasis and high match on topics related to elementary school *number* (883 minutes was allocated our of 1920 minutes), a moderate emphasis was on some topics related to elementary school geometry (422 minutes allocated of 1920 minutes). However, there was little emphasis related to topics in elementary school *algebr*a (162 minutes was allocated out of 1920 minutes) and elementary school *data* (46 minutes was allocated out of 1920 minutes). Further research is needed on how to decide how much emphasis to provide on the various school mathematics topics during teacher preparation.

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