

ZMATH 2015c.00066

Prendergast, Mark; O'Donoghue, John

Influence of gender, single-sex and co-educational schooling on students' enjoyment and achievement in mathematics.

Int. J. Math. Educ. Sci. Technol. 45, No. 8, 1115-1130 (2014).

Summary: This research investigates the influence that gender, single-sex and co-educational schooling can have on students' mathematics education in second-level Irish classrooms. Although gender differences in mathematics education have been the subject of research for many years, recent results from PISA (Programme for International Student Assessment) show that there are still marked differences between the achievement and attitude of male and female students in Irish mathematics classrooms. This paper examines the influence of gender in more detail and also investigates the impact of single-sex or co-educational schooling. This is a follow on study which further analyses data collected by the authors when they designed a pedagogical framework and used this to develop, implement and evaluate a teaching intervention in four second-level Irish schools. The aim of this pedagogical framework was to promote student interest in the topic of algebra through effective teaching of the domain. This paper further analyses the quantitative data collected and investigates whether there were differences in students' enjoyment and achievement scores based on their gender and whether they attended single-sex or co-educational schools.

Classification: C20 C60 C70 B20

Keywords: single-sex schooling; co-educational schooling; secondary education; student enjoyment; achievement

doi:10.1080/0020739X.2014.904530