Teaching with technology: Mathematics teachers’ classroom practices of GeoGebra use in the context of English secondary school mathematics

Gulay Bozkurt
Eskisehir Osmangazi University, Turkey

Datum konání: 15. listopad 2018
Začátek: 16:10
Místo konání: Katedra matematiky a didaktiky matematiky Pedagogické fakulty UK v Praze (Magdalény Rettigové 4, Praha 1), třetí patro, učebna R318

Abstrakt
Although the influence of new technologies on education has been increasing over recent decades, the incorporation of technology, particularly into mathematics education, has been slow. It has become apparent that teachers have a central role in the integration of technology in mathematics classrooms, which needs more attention when it comes to researching this issue. This research aimed at developing a more comprehensive understanding of technology integration in classrooms, by examining further a proposed model of key structuring features of classroom practice (Ruthven, 2009) which shape the use of technology in lessons and the kinds of professional knowledge required. Focusing on the use of GeoGebra (Dynamic Mathematics Software) in the context of English secondary school mathematics, this case study investigated the teaching practices, and craft knowledge of three teachers. The case study analysis, using data triangulation of interviews and lesson observations, illustrated ways in which teachers adapted their classroom practices and provided some indications of the growth of their craft knowledge in the course of appropriating GeoGebra. The main conclusion was that although teachers’ classroom practices with GeoGebra appeared consistent across the topics, the stage they were at in terms of learning to teach with this software indicated differences especially in regard to establishing a functioning resource system and appropriate activity formats, and to developing a script for handling those topics.

Bližší informace o semináři KMDM na adrese:
http://kmdm.pedf.cuni.cz/matematicko-didakticky-seminar/

Srdečně zve všechny zájemce z řad odborné veřejnosti.