

of the questionnaire and how this group of teachers uses new media in schools. On the base of such a typological classification and knowledge about the specific class sizes, specific recommendations can be given for each type to enhance the use of new media in schools.

CIT Presentations 28th Aug 11:00 – 11:40

G 22 Room PSY 2 A

MILE-Flanders: A video-based learning environment as a powerful tool for learner-oriented construction of expertise by pre-service primary school teachers

Raf Canters, Peter Op 't Eynde, Lieven Verschaffel, Jan Elen and Steven Janssens, University of Leuven, Belgium

This contribution adds to the discussion of the possibilities, limitations, and challenges of modern video technology as a tool for teacher education, which has recently gained popularity and interest for its potential for professional development. We describe the ongoing research, development and implementation project MILE-Flanders. Central in this project is MILE, a video-based software environment developed by the Freudenthal Institute (the Netherlands) containing authentic primary mathematics lessons and additional materials that can be used by student-teachers to develop a better understanding of (mathematics) teaching and classroom practice. Based upon a number of recently conducted case studies, we elaborate on how the MILE software and the developed 'courseware' can jointly constitute the building blocks for a powerful learning environment. More specifically, we focus on how MILE can be conceived as a tool for guided independent learning by these student-teachers.

G 23 Room PSY 4 S

A metacognitive support during the process of problem solving in a computerized environment

Esther Kapa, Talpiot College, Israel

A new computerized environment enabling a variety of metacognitive supports in different phases of the problem-solving process was designed to influence students' metacognition during word problem-solving and its effect has been examined in the present research. 441 students (aged 13-14) from eighth-grade integrative classes participated in this study. The pupils were randomly assigned to one of four computerized learning environments, each having a different kind of metacognitive support according to the phase of the problem-solving process: 1) during the solution process and after the completion of the problem-solving process, 2) during the problem-solving process, 3) at the end of the solution process and 4) no metacognitive support. Results indicated that learning environments which provide metacognitive support during the solution process in each of its phases was significantly more effective than learning environments which provide metacognitive support only at the end of the process. Moreover, students with low previous knowledge were more significantly influenced by metacognitive supports than students with high previous knowledge.

G 24 Room PSY 4 R

Who is the fastest runner in the world? Kinematics and sports

Yaron Lehavi, Hebrew University, Jerusalem, Israel

Yaron Schur, International Center for the Enhancement of Learning Potential, Jerusalem, Israel