

Implementation of Content and Language Integrated Learning (CLIL) in Mathematics Classroom

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The work was inspired by the European project TIE-CLIL developed over the past four years. CLIL refers to any teaching of a non-language subject through the medium of a second or foreign language (Pavesi et al., 2001). It aims to create an improvement in both the foreign language and the non-language area competence.

The described experiment is one of the outcomes of an optional CLIL course aimed at the Faculty of Education students wishing to enhance their teaching qualifications from the original Diploma in Mathematics (to be taught in Czech) and English (as a foreign language) to a new, integrated competence of teaching mathematics through English to Czech learners.

Four final year teacher trainees were placed at two upper secondary schools – one in Prague and the other in Olomouc. The Prague school provided a typical learning environment. Students, experimental group ($n = 30$), learn all the subjects in Czech. The Olomouc school, control group ($n = 29$), belongs to the network of twelve schools where selected subjects are taught in a foreign language. For the period of two weeks both groups were exposed to the same subject matter (graphs, ellipse) in English. The aim of the experiment was to monitor the teacher's role and specify the amount of his/her verbal and non-verbal support through the stages of the students' cognitive development. Observation sheets, videotapes and questionnaires became the primary source of data. The nature of support could be seen partly in the interaction of three languages of information processing: Czech (L1), English (L2) and the language of mathematics (L3). Teacher talk as an insufficient instrument was combined with a variety of pedagogical practices including the use of teaching materials and aids.

References

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