

Abstract

This work refers to the topic of bilingual mathematics education. It is focused on monitoring the communicational influences of teacher's and pupil's language, categorization of the disturbing effects and possibilities, how the teacher should prepare for them and how to solve them. A significant role plays the reflection of the teacher, as the results were done on the basis of action research during teaching in England, Germany and the Czech Republic. The teaching was realized in a second language as well for the teacher as for the pupils. The teacher was at the same time experimenter as well as author of this work. The theoretical part results from dealing with scientific literature about bilingualism, bilingual education, methodology of CLIL (Content and Language Integrated Learning), relations between first language, language of mathematics and the foreign language. In the practical part an analysis of lessons performed in mathematics with the subject of probability is carried out. The teaching was focused on playing a game with dice and deciding whether the game is fair or not. The lessons were audio taped and transcriptions of the spoken language were made. An analysis of the language, teacher's mistakes, communicational interference, proportional relations on communication of the pupils and of the teacher were carried out and the didactical and also experimental results were evaluated. It is summarized which influence is due to the limited language competence of the teacher, which mistakes (linguistic, methodical and didactical) were committed and how they influence the communication and pupil's learning. Further categorization of the communicational interference that occurred by the pupils is introduced. The sources and consequences of the interference are inquired into and means how the teacher can prepare for the disturbing phenomena and how to prevent and solve them were proposed.