# Conceptualizing and measuring adaptive teaching during autonomous learning phases in a Cooperative Learning setting

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It's well known that teachers have a great impact on students achievements (Seidel & Shavelson, 2007). With regards to the teacher's support during autonomous learning phases, e.g. in a lesson following the Cooperative Learning Model (Dyson & Casey, 2012), it is crucial to ask how teachers can best support how a student learns. Based on works on scaffolding (Van de Pol, Volman & Beishuizen, 2012) or ATI-Research (Corno & Snow, 1986), the concept of adaptivity is well established in educational research. The core idea of this construct is that the teacher needs to adapt his or her actions in a specific situation to specific needs of learners.
With this idea in mind, a study was conducted in which video data from a study on the effects of Cooperative Learning (Bähr & Wibowo, 2012) were reanalysed. Over a period of six weeks, a sample comprising of six 5$^{th}$ grade classes were taught handstands and dive-forward-roll using the jigsaw or group tournament method. In this study, adaptivity of the teacher is measured through a three step proceeding: coding the student´s action, coding the teacher´s action, and coding adaptivity as the relationship between student and teacher action. Cohen's Kappa as a measurement for interrater reliability shows good to very good results for all scales (0.70-0.96). The findings indicate that, while teachers facilitate students learning, they tend to focus differently on problem solving activities than their students. Furthermore, the findings indicate that the teacher´s adaptivity defers strongly depending on the situation of the student.

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