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**PRE-ECIS 15 WORKSHOP ON:
INNOVATING, DESIGNING AND MANAGING SERVICE
SYSTEMS WITH IS**

**“THEORY-DRIVEN DESIGN OF AN IT-BASED PEER
ASSESSMENT TO ASSESS HIGH COGNITIVE LEVELS OF
EDUCATIONAL OBJECTIVES IN LARGE-SCALE LEARNING
SERVICES”**

Abstract

Due to increasing numbers of students at German universities large-scale learning services are still a common default. These learning services lack interaction as well as feedback to assess learners' knowledge on the cognitive levels of educational objectives. This situation is alarming, since interaction and feedback in order to assess the own learning progress are important factors for individual learning success and satisfaction. The use of an IT-based peer assessment as a learning instrument can help overcome these challenges by increasing interaction and feedback without massively increasing the workload of lecturers. In this research-in-progress paper we present a theory-driven design of an IT-based peer assessment aiming to increase interaction and feedback as well as assess learners' knowledge on high cognitive levels of educational objectives in large-scale learning services. We follow a design science research approach and rely on insights from theory of interaction and feedback in order to gather requirements as well as derive design elements to create the IT-based peer assessment. As a next step, we will use the instrument in our large-scale learning service aiming to evaluate whether the IT-based peer assessment is useful to assess high cognitive levels of educational objectives, hence supporting learners during their learning process.

Keywords: Peer Assessment, Technology-mediated Learning, Educational Objectives, Design Science Research.