

## ONLINE COLLABORATION AND CHANGE IN THE LEVEL OF SELF-REGULATED LEARNING SKILLS AMONG THE STUDENTS OF A VIRTUAL UNIVERSITY: AN EXPERIMENTAL STUDY USING A WIKI IN PAKISTAN

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### Abstract

This paper is based on an intervention study that aimed to examine the online collaboration and self-regulation of learning among students studying a business management course in a virtual university in Pakistan. The usual approach to studying on this course is for students to work individually on their assignments, but in this intervention project students volunteered to participate in a group project which involved online collaboration in a wiki. Such an approach was expected to not only mitigate the effects of loss of social relationships and sense of community often experienced in online learning, (Hiltz et al.,2000) but also to harness opportunities for collaborative learning. (Dillenbourge, 1999). More specifically, the approach was expected to enable and support the development of self-regulated learning (Pintrich, 2000) and in particular socially shared regulation. (Hadwin and Oshige, 2011). Thus, this study aimed to find out to what extent students become able to self-regulate their learning while working collaboratively with peers using a wiki as a mediating element, communication and learning tool in an online learning environment. Male and female students (n=28) participated in the online collaborative group project over a 10 week period and a wiki was utilised as an online collaboration and communication medium. Data was collected using the 'Motivated Strategies for Learning Questionnaire' (MSLQ) (Pintrich et al (1993) and administered before and after participation in the group project.

The MSLQ measures changes in self-regulated learning skills including a value component, expectancy component, affective component, cognitive and metacognitive strategy, metacognitive self-regulation, and resource management strategies. Results indicated an overall increase in the mean value of post test scores of all components. The results of the paired sample t-test for the 'value component' and 'cognitive and metacognitive strategies' were not significant. The 'metacognitive self-regulation' component, however, revealed a medium effect size (0.34). The 'resource management strategies' revealed highly significant changes ( $t = -5.253$ ,  $p = .000$ ) and a large effect (0.71). These findings indicate that the online collaborative group experience is affecting the students' self-regulated learning skills. Moreover, this online collaborative group experience helped them to become independent learners by self-regulating their learning in a socially shared manner.

**Keywords:** Online Collaboration, Online Learning, Self-Regulated Learning, Web 2.0 Tool Wiki.

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