Relativity among Germane Load of CLT & HCI in Reading Tasks – A Review

ADAI Gunasekera¹, DMR Kulasekara², WAAM Wanniarachchi³ and VSS Nanayakkara⁴

¹Center for Modern Information Systems, Huazhong University of Science & Technology, Wuhan, P.R.China
²Department of Computer Science, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka
³, ⁴Department of Information Technology, General Sir John Kotelawala Defence University, Sri Lanka
⁴samudithnanayakkara97@gmail.com

According to Cognitive Load Theory, reading can be involved with three kinds of cognitive loads, namely Intrinsic, Extraneous and Germane. Among these, Germane Load refers to the use of relevant supportive material in par with various cognitive schemas to facilitate the reading and learning process. Thus, Human Computer Interaction phenomenon has become a key to this study area. Limited research has been conducted in this regard, and effective handling of Germane Load has been a research challenge. This study reviews the concern and relativity on Germane Load in Human Computer Interaction (HCI), specifically in reading tasks and the selection of the papers for the review was done through filtering topics of research papers taken from ACM Digital Library. The review of selected papers emphasize on some effects generated by Cognitive Load Theory in reading. Out of them, Work Example Effect plays a major role with HCI. This study also suggests an improvement in HCI to accommodate Germane Load effectively for reading purposes.

Keywords: CLT, HCI, Germane Load