**Predicting Foreign Vocabulary Recall**

**Abstract**

With the development of personal computers and smart phones, many new learning environments and learning methods are emerging. With this, educational data collection has become trivial and is becoming a powerful tool for improving education. This project provides an online flash-card environment for memorising foreign vocabulary, and attempts to predict whether a student will be able to recall a particular word in a target language by tracking and recording reviews. The web based software is available from desktop and mobile devices and allows students to study anywhere. Over 12 weeks, 28 students have made more than 7,500 reviews. The results were significant, with the system correctly predicting student recall of 70% of flash-card reviews. This has many implications in education, including identifying struggling students, identifying difficult vocabulary to focus on, as well as improving methods of memorisation of foreign vocabulary.