

## Guidelines for using vocabulary learning applications through Flash Cards to improve reading skills for children with learning disabilities

Ujsara Prasertsin<sup>1</sup>, Anchleeporn Lopprasert<sup>2</sup>, Somporn Wanprakob<sup>3</sup>

<sup>1</sup>Ph.D., Lecturer, Educational and Psychological Test Bureau, Srinakharinwirot University, Thailand. ubib\_p@hotmail.com

<sup>2</sup>Ph.D., Lecturer, Ramkhamhaeng University, Thailand. baan\_luklak@hotmail.com

<sup>3</sup>Teacher, Mahaprutaram Girls' School under the Royal Patronage of her Majesty the Queen. somporn\_wan@hotmail.com

**Abstract.** This research aims to study the application of flash card learning applications for improving reading skills for children with learning disabilities. We conducted qualitative research by studying the literature and research related to the writing and development of vocabulary learning applications for children with special needs. The questionnaire was used to collect interview data and information from three groups of informants; psychologists who are expert in technology, special education teachers, and parents of children with learning disabilities. The results of the study showed that informants have not experienced in using learning applications for children with learning disabilities to practice reading and writing skills for children with learning disabilities because they did not know about those applications directly. They used to operate with learning applications for normal children, however. Informants had positive attitudes to learning application in this research and reported that it had a lot of advantages for children with learning disabilities in vocabulary learning. This developed learning application more attracted children with learning disabilities to learn than normal teaching. Learning a vocabulary through flash card looks like playing a game which has image and sound, it is suitable for the natural learning of children who enjoy playing, do not be bored to learn, and lead them to improve their reading and writing vocabulary skills. In addition, children also have the opportunity to create vocabulary from the things around them. Children can link vocabulary to the things around them and create better recognition. For the highest benefit in developing and deploying applications, the application developers should consider about the appropriateness of use in learners with learning disabilities and their individual differences so it should be assessed the learners' skills before using Flash Cards to classify them into group by their levels and designed teaching styles to fit with the readiness of the students in each group. Factors that play important role in developing and deploying applications can be divided into two areas: application factor and personal factor. For application factor, both in device and design, it is consistent and appropriate for learners with learning disabilities to provide students with easy accessibility and learning. For personal factors, including all key person, school administrators who are key players in regulate policy and support in application deployment. Teachers who facilitate application using and teaching need to be trained to understand how to use the application and relay to learners and parents who need to be ready to deploy the application, both in terms of knowledge of usage, and time to share with learners to ensure that the learners can understand the content and control the time usage properly. Therefore, a user's guide and video demonstration on how to use the application or parents training before using are required.

**Keywords:** learning applications, Flash Cards, reading skills, learning disabilities

