

## The Experiment of Mobile learning in Early Childhood Vocabulary

Joni Tzuchen Tang<sup>1\*</sup>, YieSu Hwang<sup>2</sup>, Sanko Lan<sup>3</sup>.

1. Graduate School of Curriculum and Instruction, National Taipei University of Education, Taipei, Taiwan.
2. Department of Early Childhood Care and Education, Cheng Shiu University, Kaohsiung, Taiwan.
3. APP Department, ALL Products Online Corporation, Taiwan, Taiwan.

The researchers have developed a mobile game for 3-5 years old children. This is a driving game with 12 vegetable vocabularies. In order to compare the differences, the researchers put 38 children into four groups. Every group of children spend half hour a day to learn different amount of vocabulary in 8 days. The children in group 1 had teachers' guidance, and they learn two vocabularies a day. The children in group 2 played tablet without any assistance, and they learn two vocabularies a day. The children in group 3 had teachers' guidance, and they learn three vocabularies a day. The last group, group 4 played tablet without any assistance, and they learn three vocabularies a day.

The results found that:

- (1) Each group of children's scores did not reach the significant difference ( $p < 0.05$ ), but the children in tablet group (group 2 and 4) scored higher than the traditional group (group 1 and 3).
- (2) Children's scores in different kindergarten have reached the significant difference ( $p < 0.05$ ).
- (3) Children's scores in different gender did not reach the significant difference ( $p < 0.05$ ), but in 38 children's score, boys scored higher than girls ( $85.93\% > 83.03\%$ ).
- (4) Children's scores in different ages did not reach the significant difference ( $p < 0.05$ ), but in 38 children's score, older children scored higher ( $90.63\% > 85.66\% > 71.67$ ).

We can infer mobile learning can gain children's learning in vocabulary; different school caused children's learning ability; there is no significant difference in genders and ages. Therefore, mobile learning can help young children to learn and practice the vocabularies.