

A study of the relationship between technology integration instruction and influence factors in Kindergarten and Nursery

Abstract

The main purpose of this study was to: (1) Understand definition, connotation and current situation of technology integration instruction. (2) Explore technology integration instruction data between different backgrounds and influencing factors. (3) Analyze the relationships between influencing factors and technology integration instruction. (4) Explore the predictive power of influencing factors on the part of technology integration instruction.

To accomplish these purposes, the methods adopted were literature reviews and questionnaires, which served as the basis of this study. The questionnaire aspect, was carried out in public and private kindergartens and nursery schools in Taipei city and county. This research was done by questionnaire surveys. “Preschool teachers technology integration instruction questionnaire”, “influencing factors of technology integration instruction questionnaire” and “Principals’ attitude on technology integration instruction questionnaire” were designed from literature by myself with the purpose of collecting data by means of stratified random sampling. The samples include 480 principals (effective return rate is 58.1%) and 480 teachers (effective return rate is 51%). The questionnaire data analyzed statistically by description statistics, reliability analysis, t-test, one-way ANOVA, Scheffé posteriority comparison, Person-moment correlation analysis, stepwise multiple regression analysis through the use of SPSS 12.01 for windows. The major results were summarized as follows:

A. In the aspect of technology equipment

- a. Technology equipment in Taipei city and county are very universal.

B. In the aspect of technology integration instruction

- a. In the main of preschool teachers are implement technology integration instruction.
- b. The “teaching arrangement” and “teaching activity” are the best displays in the technology integration instruction way of teaching.
- c. The best dimension is “technology preliminary application”.
- d. “Taipei city and county”, “public and private”, “teachers’ years of teaching”, “educational degree of teachers”, “computer’s learning experience” and “research and study hours” have significant influences on preschool teachers implement technology integration instruction.

- C. In the aspect of influencing factors of technology integration instruction**
- a. The best influence factors of technology integration instruction is “Teaching-belief”.
 - b. The second influence factors of technology integration instruction is “Information Literacy”.
 - c. The best information literacy in preschool teachers is “basic software knowledge”.
 - d. The worst information literacy in preschool teachers is “computer use in instruction”.
 - e. “Taipei city and county”, “public and private”, “educational degree of teachers”, “computer’s learning experience” and “research and study hours” have significant influences on influence factors of technology integration instruction.
- D. In the aspect of principals’ attitude on technology integration instruction**
- a. All of the principals are identification with technology integration instruction.
 - b. The best part of principals are willing invest in technology integration instruction.
 - c. “Taipei city and county” and “public and private” have significant influences on principals’ attitude on technology integration instruction.
- E. In the aspect of relationships between technology integration instruction and influence factors of technology integration instruction**
- a. A positive correlation existed between “influence factors of technology integration instruction” and “technology integration instruction”.
 - b. “Influencing factors of technology integration instruction” did promote “technology integration instruction”.

In the last part, the researcher, based on the findings, proposes some suggestions for the principals, the preschool teachers, the teacher training institutions, the research and study institutions and the future researchers, hope to benefit accelerant technology integration instruction in preschools in the future.

Key words: preschool teacher, preschool principal, technology integration instruction, information literacy