A STUDY OF TECHNOLOGY TEACHERS' ATTITUDE TOWARD VIDEOCONFERENCE APPLIED IN EDUCATION

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Abstract: The purpose of this study was to identify technology teachers' attitude toward videoconference applied in education. Technology teachers are always playing the pioneer role to adopting new teaching technology into their professional works. Their attitude toward certain teaching technology would consider an indicator of implementing technology in education. Videoconferencing technology allows two or more people at different locations to communicate each other at the same time. In addition, it is often possible to share computer applications. It is a rich communication technology which could offers new possibilities for schools, colleges, and libraries including formal instruction, connection with guest speakers and experts, multi-school project collaboration, professional activities. Based on literature review, an investigation tool was design for collecting data of technology teachers' attitude toward videoconference applied in education. There were three attitude categories in the questionnaire. Those categories were advantage of using videoconference, type of using videoconference, and effective using videoconference. According to the result of statistical analysis, the technology teachers' attitude toward videoconference applied in education was concluded and discussed.

Technology teachers' attitude toward videoconferencing was the major issue of this study. There were three dimensions of attitude toward videoconference. Those were advantage, usage type, and

effective strategy focus. Effective use of videoconferencing technology for interactive learning requires practice and planning as well as attention to a few important instructional strategies.

Methodology

An investigation method was applied to this study. Based on literature review, research instrument was layout and designed. Questionnaires were delivered to random sampled technology teachers for collecting data. Technology teachers were asked to mark a Likert scale from "Strongly Disagree" to "Strong Agree". The population of this study was technology-practicing teacher in Taiwan. The total was around 300. The Random sample procedure was applied to distribute 45 , 15%, questionnaires . There were 37 returned. The research instrument divided into two parts, profile information, and 15 Likert-type questions focused in three dimensions.   The Alpha reliability coefficient of this instrument was 0.82. The separate Alpha values of each dimension were 0.87, 0.70, and 0.79.

RESULTS & CONCLUSION

The profile information listed as follows:
  1. Gender: male (89.2 %) ,female(10.8 %)
  2. Age: 20-25 (89.2%)   26-30 (8.1%)   31-35 (2.7%)
  3. Teacher/Administrator: Teacher (56.8) Administrator (43.2)

The results based on statistical test results were discussed as following lists.
- Based on the one-sample Test of each Likert -type question, it was concluded that technology teacher agree video-conference providing follow ing advantages:
    1. Heightens Motivation
    2. Improves Communication, Presentation, and Reading Skills
    3. Increases Depth of Learning
  It was concluded that technology teacher agree video -conference could be arrange as following types:
    1. Courses, Lessons, and Tutoring
    2. Virtual Field Trips
    3. Multi-School Projects
    4. Professional Activities
    5. Community Events
  It was concluded that technology teacher agree effectiveness of video-conference based on as following factors:
    1. Focus on Learning
    2. Set Expectations
    3. Provide Supporting Mat erials
    4. Engage Students with Variety and Interaction
    5. Encourage Dialog
- There existed no attitude difference between gender.
- There existed no attitude difference among different age range.
- There existed no attitude difference between teachers and administrators.