Public Abstract

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Title:DETERMINING RELIABILITY AND VALIDITY OF A FACULTY SURVEY TO IDENTIFY CURRENT TEACHING STRATEGIES AND APPLICATION OF INTERNET TECHNOLOGIES IN A TAIWANESE UNIVERSITY

The purpose of this study was to determine the validity and reliability of web-based teaching strategies for use as an instrument to conduct a survey to determine the level of instructional practices by a Taiwanese university faculty and the degree to which Taiwanese university faculty perceive their performance regarding internet technology usage as measured by the faculty response. The seven independent variables included gender, served college, degree source, years of experience teaching web-based courses, years in higher education, attendance at the web-based training courses, and college encouragement to attend web-based training courses. This study consisted of four dependent variables of internet technologies usage and twenty-eight dependent variables of teaching strategies.

The population included in this project consisted of all full-time faculty members employed at four colleges of a selected Taiwanese university. The entire population (N=320) was surveyed yielding a sample of 104 subjects for a 32.5% return rate and a confidence level of 95%.

The findings demonstrated that the teaching strategies questionnaire was a reliable and valid instrument. Additionally, the results of analyses showed that gender, degree source, and years of experience teaching web-based courses significantly affected teaching strategies. Moreover, analyses were used to determine that the following variables significantly affected use of internet technologies: served college, years of experience teaching web-based courses and attendance at the web-based training courses.

New knowledge was learned through interpreting the findings and provided several conclusions. First, this instrument confirmed the processes of internalization and externalization, and acculturation and reacculturation (Bruffee, 1999), from faculty members perspectives, and the dynamic of tacit knowledge to explicit knowledge, regarding explicit knowledge to tacit knowledge of knowledge creation (Nonaka and Takeuchi, 1995). Second, faculty members with western degrees were more likely to converse with students concerning the idea of individual differences than were faculty members with eastern degrees (Nonaka and Takeuchi). Third, men faculty members were more likely to request students to self-regulate their learning strategies than were women faculty members. Fourth, faculty members with more years of web-based teaching experience were more likely to provide student the chance to apply theory and practice in their learning goals than were faculty members with fewer years of web-based teaching experience. This study illustrated an explicit knowledge and tacit knowledge dynamic of the knowledge creation cycle for faculty members to support students constructing their own knowledge.