An Empirical Assessment of Science Teachers' Intentions Toward Technology Integration

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Abstract

Building upon three theoretical paradigms (technology acceptance model, social cognitive theory, and task-technology fit), the present study aims to investigate the relationship among intrinsic and extrinsic factors influencing science teachers' intentions toward teaching with information technology (IT). A sample of 226 middle school science teachers in Taiwan completed a survey; the resulting data were tested against the research model using a structural equation modeling approach. Results indicated perceived usefulness and computer self-efficacy were critical determinants of science teachers' intentions about technology integration. Computer self-efficacy and perceived fit were important antecedents of both perceived usefulness and perceived ease of use; however, perceived ease of use had an adverse effect on perceived usefulness within the science teaching context. This study discusses the implications for teachers' adoption of IT and recommendations for professional development.

Key words：Behavior; Teachers;Integration; Information Communication
Technologies