

UNIVERSITY OF MINNESOTA

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examining committee have been made.

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GRADUATE SCHOOL

The Adoption of Technology Training by Teacher Trainers in Cambodia: A Study of the
Diffusion of an ICT Innovation

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ABSTRACT

Policy makers and governments in less developed nations can implement more effective policies and programs by gaining a better understanding of the factors that impact stakeholders' adoption of information and communication technology (ICT) innovations. This mixed methods study aimed to determine which factors were most important to Cambodian teacher trainers' decision to adopt the use of ICT skills. This study was based on a three-month internship at UNESCO Phnom Penh, Cambodia where the researcher worked on the *Establishing the Effective Use of ICTs in Education for All in Cambodia* project. The study is conceptually grounded in Rogers' (2003) model of the diffusion of innovations theory. Analyses were conducted on 379 surveys, 17 interviews, UNESCO project documents, and Cambodian Ministry of Education documents.

It was found that 70% of the teacher trainers adopted use of the ICT skills in some manner while 30% of teacher trainers either rejected or discontinued use of the ICT skills. MANOVA results indicated that different types of adopters had significant differences in their perceptions of eight tested characteristics (relative advantage, voluntariness, ease of use, image, compatibility, results demonstratability, trialability, and visibility) and four demographic variables (age, gender, experience, and type of training college). ANOVA results indicated that seven of the eight characteristics (not image) impacted adoption whereas none of the demographic variables had a significant influence on adoption rates. The discriminant analysis indicated that after controlling for demographics, adoption rates were most significantly influenced if use of the ICT skills was perceived to be easy and mandatory. Barriers to adoption included broken computers, language limitations, lack of electricity, lack of computers, lack of Internet,

difficulty of use, lack of practice, and the lack of ability to find advantages over previous methods.

The findings are important for future ICT in education initiatives. To increase adoption there is a need to mandate use or provide incentives for use while reducing complexity of the ICT innovation. Focus should be placed on advantages and outputs of the ICT innovation while allowing stakeholders ample opportunities to practice.

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