

# **Comparative Case Study as a Research Method to Investigate the ICT Use in Business Schools**

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# ICT in Higher Education

**Means for creating a learning environment**



**Tools/media for delivering courses**

Integrating ICT in teaching and learning provides “the means to create a learning environment in which learners can be creative, critical, constructive, and become producers of their own perspectives and identity informed by other participants” ([Nagy & Bigum 2007, p. 81](#))

## **Business School:**

- an academic program that delivers courses related to business and management to prepare students getting expected **career in business** or in later life
- an academic institution that not only preparing future career for students, but also **train students become businesspeople**

Professional institutions required to understand the current change in business world which have an effect on business growth and development as well as business education itself.

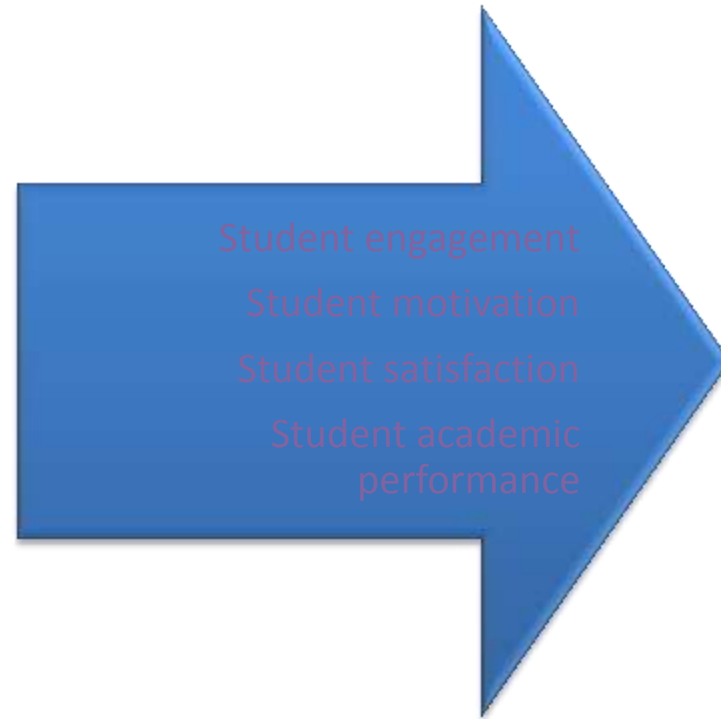
(Escudero 2011; Friga, Bettis & Sullivan 2003; Hawawini 2005; Khurana 2007).

Integrating ICT in business education curriculum is a key resource to re-design teaching and learning practices as well as to offer business curriculum that meet current and upcoming business requirements.

(Alavi & Gallupe 2003; Leidner & Javerpaa 1995; Sethamraju 2007; Tamim et al. 2011; Zeeshan, Hashmi & Batti 2011)

# Inconclusive findings







**Campbell (2000)** examined the impact of ICT use in Business Systems class on students' interaction and experience to absorb information from learning group. The study found that students who study using technology-mediated learning have a stronger feeling of friendships and greater motivation than students who study in traditional class.

**Serva and Fuller (2004)**, found that the ability of business lecturers to use computer-based media improves learning effectiveness.

**Bawaneh (2011)**, found that there is a positive impact of ICT-mediated courses with student performance. These findings support the benefits to be gained by providing course materials online and encouraging both faculty members to use online in providing course materials and students to access the materials posted and to actively participate in online discussion.

\*)ICT use had been measured from students' perspectives using two dimensions: the number of online files viewed by students and the number of online discussion messages posted by them.

A second-order meta-analysis study (Tamim et al. 2011), a synthesis of 1,055 studies, shows a significant and positive influence of the integration of ICT on students' performance.

A meta-analysis study conducted by The United States Department of Education confirms that the students who learn through online environment have higher performance than those who learn through classical technique (Matthews 2012).

## **Unsatisfactory impacts:**

ICT in business schools has low impact on learning effectiveness (Redmann 2004).

ICT integration in teaching and learning had no significant impact on student achievement and satisfaction (Noguera and Watson 2004).

- Technology-mediated learning has no significant effects on learning effectiveness and satisfaction (Hu & Hui 2012).
- There is no evidence that ICT use in teaching will give better results for learning effectiveness than face-to-face method (Hu & Hui 2012).
- ICT integration into learning practices has not given the significant impact to learning effectiveness as expected (Romeo, Lyoyd and Downes 2012).

- ❑ The inconsistent research findings of ICT use in business education indicate that investment in ICT in undergraduate and graduate business studies has not been equivalent in the actual use of ICT (Serva & Fuller 2004).
- ❑ The current use of educational technology has failed to live up to its promise (Kennedy 2013).
- ❑ Business educators seem oblivious to the need of addressing successful implementation of using ICT to enhance the design and delivery of the business curriculum.

Understanding the current status of ICT use as well as factors influencing the integration of ICT in the teaching and learning is necessary to enhance the effective use of ICT in business education (Hawawini 2005)

- To what extent have business schools integrated ICT in the teaching and learning process?
- What are factors influence the use of ICT in the teaching and learning processes in business schools?

# What is “ICT use?”

Integration, acceptance, adoption, and use of ICT have been used synonymously and interchangeably in the research literature ([Lloyd 2005](#); [Mosley 2012](#))



## Some definitions of ICT use/ICT integration

- degree of current usage of technology (Davis 1989)
- demonstrable willingness within user group to employ ICT for supporting the tasks (Dillon 2001).
- Integrating the ICT into teaching and learning means that instructors move from initial adoption and one-time demonstrations to implementing technology as part and parcel of instruction (Watson 2005).

## Factors that might support/hinder the use of ICT:

### Factors Related to People

- Perception (no benefit using ICT, stressful)
- Anxieties
- Attitude (willingness to allocate time, willingness to use)
- Skills (computer literacy)
- English skill

### Factors Related to System

- Reward System
- Training System
- Organizational Culture
- Curriculum Design

The factors are different and vary from country to country (Krishnan 2012; Stafford et al. 2012).

Abundant studies conducted in a single context study (developed or developing countries); mostly conducted in developed countries (Krishnan 2012).

Bringing data from two different contexts in one study is valuable to provide a better analysis of ICT use in higher education sector, business education in particular.

Investigating the current use of ICT in business education in two different circumstances requires detail investigations that enable the researchers to analyse the phenomenon in natural setting through in-depth investigations.

A qualitative research design is a research design that allows a researcher to obtain “rich and thick” data by interviewing, discussing, or observing the “phenomenon” or “cases” (Creswell, 2009; Yin 2009).

The researchers will be able to conduct a detail investigation of social and organizational characteristics as well as human resource behaviours and their meanings within qualitative research (Lapan, Quartaroli & Riemer 2012).

The qualitative research design will also enrich the literature since the popular research design for ICT research is the quantitative method (Benamati & Rajkumar 2002; Benbasat, Goldstein & Mead 1987; Legris, Ingham & Collerette 2003).

This study proposes that the use of detailed qualitative research design, such as the case study method would be beneficial to provide valuable insights for this field. The case study approach will explain the complexities of real-life situations in ICT use which may not be captured through quantitative research design as previous studies have done before. Moreover, as the problems of ICT use in higher education are differ from country to country; **a comparative case study** is significant to be conducted in order to provide detail information of the current status of ICT use in business schools in two different context.

## A Case Study Design

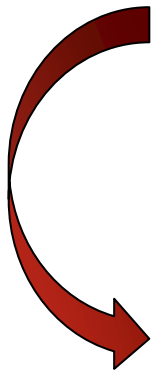
- A suitable model for study which is undertaken in the specific context (Yin 2009).
- Case studies are the preferred method when “how” or “why” questions are being posed or the study is seeking to explain some present circumstances (Yin 2009).
- Case studies are also appropriate when the research intends to address a descriptive question, such as “What is happening or has happened?” (Yin 2012).

## Comparative method

- The comparative method enables us to see *ourselves* as it were, from the outside.
- When you see how a country does something, it raises 2 questions: “Why don’t we do that? Why do we do what we do?”

**A business school  
in developing  
countries:  
Indonesia**

**A business school  
in developed  
countries:  
Australia**



**Comparative case studies**



## Data Collection Methods

### ❖ Multiple Sources of Evidence (Data)

- a major characteristic of cases study research (Gillham 2000)
- This convergence adds strength to the findings and enables the researchers to understand of the whole phenomenon (Baxter & Jack 2008).
- the use of different methods of data collection in case studies is important to triangulate the evidence (Telliss 1997)

### ❖ Individual in-depth interviews; focus group interviews; observations

**Research Participants:** Business lecturers, Management of business school, Supporting staff related to ICT use in teaching and learning





Theoretical Thematic Analysis → Analysis is guided by an existing theory and theoretical concepts (as well as by the researcher's standpoint and disciplinary knowledge) (Braun & Clarke 2013).