

# Using Knowledge Building as a Pedagogical Rein on e-Learning: A Case in Associate Degree Business Project

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# Outline

- 1. Background**
- 2. Objectives**
- 3. Methods**
- 4. Findings**
- 5. Lessons Learnt**



# Background

- ❑ Knowledge Building (KB) model for deep learning
- ❑ Genuine learning in collaborative and distributed inquiry
- ❑ Higher Education Context in Hong Kong

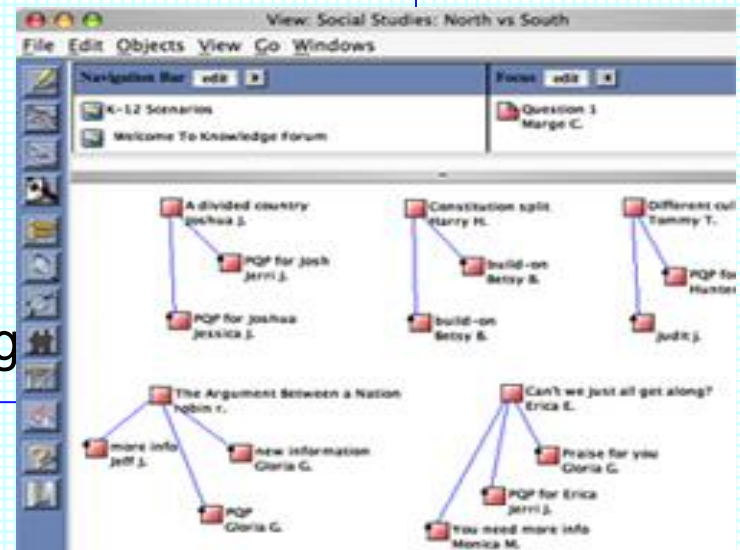
# Knowledge Forum© (KF)

## ❖ Software as a Service (SaaS) on a network

- Platform mainly run: Mac, Windows, Linux

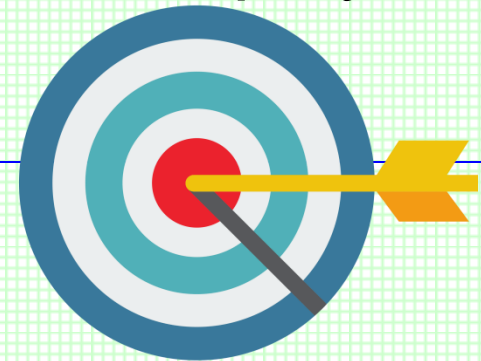
## ❖ A collaborative space to share

- ideas, data, organize course materials, analyze research results, discuss texts, and cite reference material.
- Level of use: Any ages
- Goal: community knowledge building



# Objectives

- + Being a first attempt to embed KB in AD business subject teaching
- + Conduct exploratory study to examine the learning behaviors under a different environment
- + Extend KB to promote collective inquiry in higher education



# Objectives

Traditional Classroom	Knowledge Building Classroom
<ul style="list-style-type: none"><li>• Teachers as knowledge source to provide learning content to students</li></ul>	<ul style="list-style-type: none"><li>• Students learn through discussion, inquiry and scaffolding among peers and learning community</li></ul>
<ul style="list-style-type: none"><li>• Students answer predefined questions set by teachers</li></ul>	<ul style="list-style-type: none"><li>• Students find their questions of interest and pursue exploratory search</li></ul>
<ul style="list-style-type: none"><li>• Teachers assess students</li></ul>	<ul style="list-style-type: none"><li>• Students assess each other through peer evaluation</li></ul>

# Methods

# Participants

**8 AD students**

- Female: 3, Male: 5
- Age: 19-22
- Taking the 14-week course: “Organizational Learning in Business Enterprises”

**2 lecturers**

- 12 years of teaching experience
- Expertise in knowledge management and computer-supported learning



# Three phases of pedagogical designs

## Phase 1

### **Introducing collaborative learning in classroom**

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- Introduction of “the concept of learning in organization”
- Reflection task: to contrast the learning style between this lesson and regular classes

## Phase 2

### **Bridging knowledge building from classroom to KF**

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- Content-based collaborative task
- Raise quality questions regarding the contents of the first lesson
- Vote the best question with justification for the inquiry on FK

## Phase 3

### **Deepening of inquiry and consolidating understanding**

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- Peer’s work: Write summary on the selected question
- Researcher: to chose samples of students’ summary for class discussion

# Findings

# Findings

**Table 1: Students' participation and collaboration on KF**

	Year 2012 (n = 8) (Mean)
Notes created	14.5
Percentage linked	79.1
Percentage read	90.3
Scaffold used	16.6

# Findings

**Table 2: Frequency of inquiry, explanation and peer-assessed comments**

	Study 1 (n = 8) (Total, Average)
No. of Inquiry	44 (5.5)
No. of Explanation	92 (11.5)
No. of peer-assessed comments	23 (2.9)
Total	159 (19.9)

# Findings

**Table 3: Multiple regression of ATK indicators predicting examination results**

	R-square change	F-Change	p-value
Notes created	0.12	0.76	0.42
% read	0.57	8.83	0.03*
Scaffold used	0.06	0.93	0.39

\*significance level = 0.05

# Lessons Learnt

## 🌐 Higher students' engagement:

- ◆ motivated in collaborative and collective inquiry

## 🌐 Deep learning:

- ◆ connected knowledge and refined understanding

## 🌐 Future success pillars:

- ◆ Theoretical model application
- ◆ E-Learning platform

**Thank you**