

**BLENDED SOCRATIC METHOD OF TEACHING (BSMT) MODEL:  
AN INSTRUCTIONAL MODEL TO ENHANCE CRITICAL  
THINKING SKILLS OF UNDERGRADUATE  
BUSINESS STUDENTS**



**A Thesis Submitted to the Graduate School of Naresuan University  
In Partial Fulfillment of the Requirements  
for the Doctor of Philosophy Degree in Education  
October 2015**

**Copyright 2015 by Naresuan University**

Dissertation entitled "BLENDED SOCARATIC METHOD OF TEACHING (BSMT): AN  
INSTRUCTIONAL MODEL TO ENHANCE CRITICAL THINKING SKILLS OF UNDERGRADUATE  
BUSINESS STUDENTS"

By Mrs. Eugenia Arazo Boa

has been approved by the Graduate School as partial fulfillment of the requirements  
for the Doctor of Education in Curriculum and Instruction of Naresuan University

Oral Defense Committee

x Mary Sarawit Chair  
(Associate Professor Mary Elizabeth Sarawit, Ph.D.)

Amornrat Watanatorn Advisor  
(Assistant Professor Amornrat Watanatorn, Ph.D.)

Kanchit Tagong Co-Advisor  
(Associate Professor Kanchit Tagong, D.A.)

Areeruk Mejang External Examiner  
(Assistant Professor Areeruk Mejang, Ph.D.)

Approved

Aumporn Lincharoen

(Assistant Professor Aumporn Lincharoen, Ph.D.)

Associate Dean for Academic Affairs

for Dean of the Graduate School

27 OCT 2015



## ACKNOWLEDGEMENT

Perseverance, hard work, and dedication were my formula for completing my Ph.D. It was both challenging and fulfilling journey of my life. Writing the acknowledgment was one of the most anticipated phases in my Ph.D. journey as I had the chance to express my heartfelt gratitude to many people who inspired, supported, taught, motivated, and encouraged me to successfully complete my Ph.D. I could not have succeeded without the invaluable support of these people.

My deepest gratitude is specially extended to my advisor Assistant Professor Dr. Amornrat Wattanatorn for her invaluable support, understanding, and guidance. With her, I found a teacher, a friend, and a “guide on the side” never letting me loses my path. She gave me freedom and encouragement to do my best in developing my teaching model. Meeting and knowing her is one of the best moments in my Ph.D. journey. The same is true with my advisor - Associate Professor Dr.Kanchit Tagong. From my work to my study, he has been my constant supporter. He’s candid comments and suggestions on my paper contributed a lot.

I would like to give my special thanks to Associate Professor Dr. Pornchulee Achava-Amrung, former Director of Naresuan University International College (NUIC), for giving me a scholarship to study Ph.D. Her role in my life did not end there. She was also one of my experts who validated my model in this study, my morale booster and an “alarm clock”, constantly reminding me to prioritize and finish my study, my friend, and my second mother. I’ll be forever grateful to her.

Next, I would like to thank Associate Professor Dr. Mary Sarawit for being one of my experts in my teaching model and my editor as well. She has been a constant inspiration as a former boss, colleague and mentor. She is truly an epitome of a teacher. A few encounters with her during my Ph.D. journey gave me a new outlook and energized me to keep going in my study.

Also, I would like to express my gratitude to my experts, who validated my model and enlightened me with their helpful comments and suggestions, Associate Professor Dr. Wareerat Kaewurai, Assistant Professor Dr. Sudsuang Yutdhana, and Dr. Clement Trahan. A special thank goes to Dr. Yuthana for helping me in my statistics and to Clement for being one of my editors and motivator during my study.

I am very grateful too to my NUIC family, my colleagues and friends, and supporting staff at the College. A simple smile and “hi” uplifted my spirit.

This research would not have been possible without my students. I might have been a teacher by birth, but I failed to notice it. My students motivated and broadened my perspectives on how to be a teacher. The BSMT model is lovingly dedicated to my students.

In addition, these acknowledgements would not be completed if I did not mention the most important reason for my living, my family. First, is my buddy, best friend, and husband, Del. Thank you for the love, support, and everything. His love, patience, support and unwavering belief in me, I’ve been able to complete this long dissertation journey. He is my biggest fan and supporter. Second, are my children, Aeden and Addi for their little hugs and I love you’s. These two little men are my constant energizer and inspiration. Of course, special thank goes to my parents and two siblings, Lyn and Wilma. Both of my parents have instilled many admirable qualities in me and given me a good foundation with which to meet life. They’ve taught me about hard work and self-respect, about persistence and about how to be independent. My parents are a great role model of resilience, strength and character. Both have always expressed how proud they are of me and how much they love me. I too am proud of them and love them very much. They were my “back-up crew”, quite not visible but always there to give love and support in everything I do.

Last, but certainly not least, the Divine Providence. I have a strong faith that there is someone out there looked after me and guided me during my Ph.D. journey. I thank You with all my heart.

Eugenia Arazo Boa



**Title** BLENDED SOCRATIC METHOD OF TEACHING (BSMT)  
MODEL: AN INSTRUCTIONAL MODEL TO ENHANCE  
CRITICAL THINKING SKILLS OF UNDERGRADUATE  
BUSINESS STUDENTS

**Author** Eugenia Arazo Boa

**Advisor** Assistant Professor Amornrat Wattanatorn, Ph.D.

**Co-Advisor** Associate Professor Kanchit Tagong, Ph.D.

**Academic Paper** Thesis Ph.D. in Curriculum and Instruction,  
Naresuan University, 2015

**Keywords** Instructional Model, Critical Thinking, Socratic Method of  
Teaching, Blended Learning, Business Case Study,  
Business Students

### ABSTRACT

The main purpose of this study was to develop an instructional model known as Blended Socratic Method of Teaching of Teaching (BSMT) model to enhance the critical thinking skills of undergraduate business students. The specific purposes of this research were 1) to survey the critical thinking skill of undergraduate business students, 2) to develop and validate the instructional model to enhance the critical thinking skill of the undergraduate business students, 3) to implement and determine the effectiveness of the instructional model, and 4) to evaluate the level of satisfaction of undergraduate business students towards the instructional model.

The research procedure comprised of four phases corresponding to four research objectives: 1) surveying the critical thinking skills of 371 undergraduate business students at Naresuan University International College (NUIC) focusing on the three critical thinking competencies—recognizing assumptions, evaluating arguments, and drawing conclusions, and the determination of the level of their critical thinking; 2) developing the instructional model and supplementary materials followed by validation of the model by five experts; 3) implementation of the developed instructional model with 40 undergraduate business students majoring in Human Resource Management at Naresuan University International College (NUIC), and the

determination of the effectiveness of the model; and 4) evaluation of the satisfaction of the undergraduate business students towards the instructional model.

The results of the study were as follows:

1. The undergraduate business students have deficient critical thinking in RED (Recognizing assumptions, Evaluating arguments, and Drawing conclusions) as they scored “well below average” in the critical thinking appraisal.

2. The developed model comprising six elements, namely, focus, syntax, principles of reaction, the social system, support system, and application. The experts were in complete agreement that the model is “highly appropriate” in enhancing the critical thinking skills of the undergraduate business students. The heart of the model is the syntax comprising of five steps: group assignment, analysis and writing of case studies, class presentation of the business case analysis, Socratic discussion in class, posting of the case in class Facebook account, and online Socratic discussion using Facebook. The BSMT model is an authentic and comprehensive model combining Socratic Method of teaching, ICT through Facebook, and business case analysis.

3. During the implementation of the model, the findings revealed that the developed model is an effective instructional model to enhance the critical thinking skills of the undergraduate business students, as shown in the students’ pre-test and post-test score in the critical thinking appraisal, which is significantly different at 0.01 level of significance.

4. The undergraduate business students are highly satisfied with the Blended Socratic Method of Teaching (BSMT) Model as they evaluated the model strongly agree in all aspects - objectives, syntax, content, support system, principles of reaction, the social system, measurement and evaluation, and impact on students and students self-rated accomplishments. The undergraduate business students were in complete agreement that the model enhanced their critical thinking as well as other 21<sup>st</sup> century skills, communication and collaboration, problem solving, and decision making.



## LIST OF CONTENTS

Chapter	Page
<b>I INTRODUCTION.....</b>	<b>1</b>
Rationale of the Study.....	1
Research Questions.....	7
Research Objectives.....	7
Significance of the Study.....	8
Scope of the Study.....	8
Operational Definition.....	8
Essential Components of the Study.....	10
<b>II REVIEW OF RELATED LITERATURE AND RESEARCH....</b>	<b>11</b>
Teaching/Instruction.....	11
21 <sup>st</sup> Century Skills.....	82
Student-Centered Learning.....	90
Business Students.....	96
Business Case Analysis.....	98
Related Researches.....	99
<b>III RESEARCH METHODOLOGY.....</b>	<b>103</b>
Phase I: To survey the critical thinking skills of undergraduate business students.....	103
Phase II: To develop and validate the instructional model to enhance the critical thinking skills of the undergraduate business students.....	106
Phase III: To implement and determine the effectiveness of the instructional model.....	108
Phase IV: To evaluate the level of satisfaction of undergraduate business students towards the instructional model...	110



## LIST OF CONTENTS (CONT.)

Chapter	Page
<b>IV RESULTS.....</b>	<b>112</b>
Phase I: Survey of the critical thinking skills of undergraduate business students.....	112
Phase II: Development and validation of the instructional model to enhance the critical thinking skills of the undergraduate business students.....	115
Phase III: Implementation and determination of the effectiveness of the instructional model.....	131
Phase IV: To evaluate the level of satisfaction of undergraduate business students towards the instructional model.....	142
<b>V SUMMARY, CONCLUSION AND RECOMMENDATION.....</b>	<b>162</b>
Summary of the Study.....	162
Discussion.....	164
Conclusion .....	179
Recommendations.....	180
<b>REFERENCES.....</b>	<b>183</b>
<b>APPENDIX.....</b>	<b>196</b>
<b>BIOGRAPHY.....</b>	<b>351</b>

## LIST OF TABLES

Table		Page
1	Synthesis of How the Socratic Method of Teaching Promotes Critical Thinking Skills.....	58
2	Synthesis of How Blended Learning Promotes Critical Thinking Skills.....	68
3	The Blended Socratic Method of Teaching (BSMT) Model and Critical Thinking Skills.....	70
4	The RED Model of Critical Thinking and the Blended Socratic Method of Teaching (BSMT) Model.....	72
5	Syntax Justification of the Blended Socratic Method of Teaching (BSMT) Model for Undergraduate Business Students.....	75
6	Comparison of Teacher-centered and Learner-centered Paradigms (Learner-Centered Assessment on College Campuses by Huba and Freed).....	93
7	Overall Critical Thinking Test Score of Undergraduate Business Students.....	113
8	Critical Thinking Test Score of Subsections of Undergraduate Business Students.....	113
9	Critical Thinking Test Score by Major of Study.....	114
10	Expert Evaluation of the Blended Socratic Method of Teaching (BSMT) Model.....	122
11	Expert Evaluation of the Guidelines on How to Use the Blended Socratic Method of Teaching (BSMT) Model.....	127
12	Overall Comparison of the Critical Thinking Appraisal of the Experimental Group.....	141
13	Detailed Comparison of the Pre-test and Post-test Scores of the Subsections of the Critical Thinking Appraisal.....	141

## LIST OF TABLES (CONT.)

Table		Page
14	Overall Students' Satisfaction on the Blended Socratic Method of Teaching (BSMT) Model.....	143
15	Students' Satisfaction on the Blended Socratic Method of Teaching (BSMT) Model.....	144



## LIST OF FIGURES

Figure		Page
1	Essential Components of the Study.....	10
2	Paul-Elder's Critical Thinking Model.....	27
3	Elements of Thought.....	28
4	Intellectual Standards.....	29
5	Intellectual Traits.....	30
6	RED Model of Critical Thinking.....	31
7	Keys to Critical Thinking.....	32
8	Types of Blended Learning.....	62
9	P21 Framework for 21 <sup>st</sup> Century Learning.....	82
10	Seven C's of the 21 <sup>st</sup> Century Teaching, Adapted from Ferguson	89
11	Bloom's Taxonomy.....	95
12	Core Critical Thinking skills .....	97
13	The Blended Socratic Method of Teaching (BSMT) Model.....	116
14	The Syntax (Instructional Process) of the BSMT Model.....	117
15	Screen Shot of the Class Facebook Account.....	136
16	Excerpt of Socratic Facebook Discussion 1.....	136
17	Excerpt of Socratic Facebook Discussion 2.....	137



## CHAPTER I

### INTRODUCTION

#### **Rationale of the Study**

Critical thinking, as defined by the National Council for Excellence in Critical Thinking [1], is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In a seminal study on critical thinking and education in 1941, Edward Glaser defines critical thinking as follows “the ability to think critically involves three things: 1) an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experiences, 2) knowledge of the methods of logical inquiry and reasoning, and 3) some skill in applying those methods.” Whereas, in a broader view, Paul and Elder [2] defines critical thinking as that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them. In a similar way, Glaser pointed out that critical thinking calls for a persistent effort to examine any belief or supposed form of knowledge in the light of the evidence that supports it and the further conclusions to which it tends.

Critical thinking has been recognized as indispensable in both personal life and in job performance. Before making any decision, a person has to gather, analyze, evaluate, and synthesize all the necessary information, as well as predict the consequences of the course of each alternative. To be successful in business, a person must possess a critical thinking skill in order to make informed decisions quickly in a highly competitive and rapidly changing environment. In a globalized world today, businesses place more emphasis on critical thinking skills when hiring people to work for them [3]. Similarly, in another survey of 400 senior HR professionals, it was revealed that the respondents place critical thinking as the highest important skill for their employees [4]. In addition, Paulson [5] stresses the same ideas that in hiring



employees, businesses are looking for people who have the ability to work collaboratively, think critically, and solve problems.

Since the critical thinking skill is prioritized and demanded by the job market, educators are of a consensus that it should be one of the primary concerns for any educational institution to produce graduates with a high level of thinking skill, and this skill should be emphasized in every school curriculum. It can be either taught as a separate course or as an integral ingredient embedded in some courses [6]. In some countries, an organization has been set up to promote the teaching of critical thinking, e.g., in the USA, the National Council for Excellence in Critical Thinking was founded in 1980 and the Critical Thinking Community; the Council of Europe, an organization strongly advocating the multiple purposes of education, including critical thinking; and the Asia Foundation.

In Thailand, education policy requires that Thai students should be able to reason, criticize, know how to solve problems, and apply these skills in real life situations [7]. The importance of critical thinking is also stressed in the National Education Act of 1999, as stipulated in Section 24. In compliance with the stipulation, Naresuan University requires its curricula to instill in students at all levels the six “smarts” namely: smart at work, smart in people skills, smart in creating novel ideas/thinking, smart in life skills, smart at problem solving, and smartly equipped with knowledge, skills, and attitudes as global citizens [8]. These “smarts” are directly linked to the 21<sup>st</sup> century skills, specifically critical thinking and information and communication technology [9], which are the core issues emphasized in this study.

The 21st century skills have been used by educators and put at the center of learning [10]. According to an educator, schools must provide students with a broader set of “21st century skills” to thrive in a rapidly evolving, technology-saturated world [11]. The Partnership for 21<sup>st</sup> Century Learning enumerated the skills of 21<sup>st</sup> century learners as follows: learning and innovation skills; information, media and technology skills; and life and career skills. Critical thinking is one of the learning and innovation skills and presupposes that the learner can reason effectively, use system thinking, and make judgments and decisions.

Unfortunately, the attempt to inculcate critical thinking in Thai students has been far from successful. Students still lack critical thinking skills. This is due, in part, to the teaching method used. That is, students are still taught to listen, rather than to question [3]. Other factors contributing to these problems include Thai culture, the school system, and religion [12].

Educators around the globe are of consensus that students lack critical thinking skills. There are tons of studies supporting this universal fact. As evidence of the crisis, the Business Roundtable, a network of company chief executives, found in a 2009 survey of 600 employers that it was difficult to find qualified employees who possess critical thinking [13]. Also, in a study conducted by Gerald Smith [14], he found out that students cannot understand challenging texts or complex issues; their reasoning is often illogical and they do not critically assess arguments; they solve problems in a rote formulaic way, rather than through creative strategies grounded in sound analysis; and their decisions reflect biased appraisals that satisfy no plausible norms of rationality. In another study that followed several thousand undergraduates through four years of college found that a large number of them didn't learn the critical thinking which is assumed to be at the core of a college education [15].

Furthermore, based on my own experience as a lecturer in higher education for nearly ten years, students lack of critical thinking skill is manifested by their inability to see contingency in cases of complexity, inability to connect and see the big picture of a certain theory as relates to real world experiences, inability to infer and draw conclusions, and inability to integrate multiple perspectives with a multiplicity of facts and determine the best course of action. What appears to be lacking is the ability to take knowledge and transform it into uses that benefit not only the individual using critical thinking but also the context and circumstances of the thinker. For example, in my class, when problems, situations, or issues are presented, and when students are asked to comment, react, suggest, answer or ask questions, very few will offer their ideas. When ideas are offered, they are normally very short and lack rationality. In the researcher's own classroom, she has witnessed the deficiencies and problems in critical thinking of students. Even though there are efforts to promote critical thinking



skills, the time allotted for each class is not sufficient to develop students' critical thinking.

In order to address the deficient critical thinking skills of students, an instructional model based on the Socratic method of teaching will be developed. Many scholars have asserted that the Socratic method of teaching is an effective way to enhance critical thinking skills since it aims to elicit student responses through a series of probing questions which encourage them to think logically before offering their answers [3]. It is added that in so doing, students are compelled to carefully and thoughtfully reexamine whatever assumptions or prejudices they may have that underlie their beliefs and to uncover misconceptions and inadequacies in their reasoning, thus resulting in more defined, accurate and carefully expressed ideas [3]. Some proponents of adopting the Socratic method to foster critical thinking skills such as [2] argue that this method has proven the most powerful teaching tactic for fostering critical thinking since antiquity. As such, one of his greatest students Plato, in his famous book *The Dialogues*, considered his teacher's method, or the Socratic method, as the "coping-stone" of the educational system [16]. In line with Plato, Whiteley [16] stresses the need to reinstitute the Socratic method in the classroom as it is the "finishing touch" for the process of learning. Similarly, Reich [17] a recipient of 2001 Walter J. Gores Award for Teaching Excellence at Stanford University argues that it is time to reclaim the Socratic method as a relevant framework for actively engaging students with the critical thinking process. Furthermore, one of the findings found by Peterson indicates that Socratic method is a unique approach that facilitates critical thinking. The findings likewise added that by imposing a series of guided questions to students, an instructor can challenge students to think for themselves, learn from their mistakes, and give them the necessary tools they will need to assess situations they will encounter in both their professional and personal lives.

As important as the above topic because it will form part of the instructional model to be developed is the information communication technologies (ICT) and social media. For students nowadays who are considered digital natives [18], ICT is becoming a ubiquitous component of learning [19]. ICT's are information-handling tools-a varied set of goods, applications and services that are used to produce, store,

process, distribute and exchange information [20]. On the other hand, social media is a broad term which has been used to apply to a variety of technologies, including wikis, blogs, microblogs, social networking sites, virtual worlds, and video-sharing sites-to name a few [21]. ICT in the classroom serves to individualize learning, is interactive, low cost, distance and climate insensitive, and so can serve multiple teaching functions with high speed delivery and uniform quality [22] while social media is proven to enhance the learning environment where students are more comfortable communicating online rather than in the classroom and where students can study anytime and anywhere.

Therefore, to effectively deal with the crisis of deficient critical thinking of students, the Socratic method will be blended with ICT through a popular social networking site - Facebook, which is referred to as blended learning. Blended learning which refers to the mixing of traditional face-to-face teaching and online education [23] is gaining popularity due to findings of numerous benefits to student learning. As a testimony to its success in the classroom, blended courses have proven to be among the most popular choices for students at institutions where they are offered [24]. In addition, many authorities cited that blended courses can lead to increased student engagement [25]) and students in online conditions performed better than those learning the same material through traditional face-to-face instruction [26]. In another study with undergraduate students at Rajabhat University in Thailand as subjects, a blended instructional model showed that students indicated satisfactory learning achievement and enhanced critical thinking [27]. Moreover, in a corporate world, blended learning was proven to be a success as well when it was used to train executives and managers in leadership skills at Xerox Corporation. The training was a success and the company determined a positive return on investment as a result.

In addition to the above findings, when the Socratic method of teaching and blended learning are integrated, there are even more advantages in enhancing critical thinking. According to Gilbert and Flores-Zambada [28], the Socratic method of teaching can now be effectively accomplished in an online discussion forum and using the pedagogy was proven to be both a positive experience for the instructor, and the students. Also one of the main findings of this study was that critical thinking abilities



were enhanced by encouraging students to comment on their peers' online discussion postings. Similarly, Whiteley [16], in his study emphasized that incorporating the Socratic approach as part of a Virtual Classroom Setting (VCS) in order to develop the critical thinking skills of students reflects the use of an instructional strategy that is considered a sound pedagogical foundation or model in such an environment.

Furthermore, case studies will be used as a support system in enhancing students' critical thinking skills. The case study method or business case analysis is a method of giving students a real historic business situation consisting of a detailed factual description of an issue faced by an organization together with the surrounding facts, circumstances, events, and management opinions [29]. It was argued that learning occurs most effectively when concepts and techniques are experienced not in an abstraction but in realistic situations [30]. Through this method, students are exposed to "a chunk of reality" [29], where the critical thinking skill is best improved.

Having presented the core elements of the instructional model to be developed in enhancing critical thinking, this study will focus on undergraduate business students. Preparation for business careers was identified nearly a century ago as one of the important missions of higher education [31]. In addition, Flexner since 1923 stated that one of the three kinds of students served by a higher education is future businessmen and businesswomen. Likewise, he added that an ordinary citizen interacts with businesswomen and businessmen far more frequently than with members of other professions, hence the focus of this study is the undergraduate business students. Moreover, in the business setting, failure to think critically can result in missed opportunities, faulty decisions, inefficiencies and ineffectiveness [32]. They added that as the pace of change and the complexity of problems in the business world become more compressed and convoluted; the failure to think critically has far-reaching implications that come with financial, social, and personal costs.

In holistic perspectives, why do we have to be concerned with critical thinking? The answer is very simple – it is not only for business students, but also for people in general because whenever we are dealing with human life, we are almost always dealing with thinking. Thinking is the way in which the mind makes sense of the world, framing and constructing reality and experience of the world. With no



thinking, there is no understanding of anything, and life will be meaningless unless one thinks as René Descartes says, *Cogito ergo sum* or “I think therefore I am”. To understand the world, people need to think logically and systematically, questioning every assumption and premise. Through this study, a pedagogy known as the Blended Socratic Method of Teaching (BSMT) model combined with a case method will address the deficiency and enhance critical thinking of undergraduate business students. Hence, the researcher developed an instructional model that will alleviate the problem of students’ deficient critical thinking.

### **Research Questions**

Enhancing the critical thinking skill of the learner in order to meet the demands of future employment is a challenging commitment and poses different barriers to teachers. As such, this study will seek to answer the following questions:

1. What is the level of the critical thinking skill of undergraduate business students?
2. How can the appropriateness of the instructional model be developed and validated to enhance the critical thinking skill of the undergraduate business students?
3. What are the results of the implementation process and what is the effectiveness of the instructional model?
4. What is the level of satisfaction of undergraduate business students towards the instructional model?

### **Research Objectives**

In order to develop the instructional model to enhance the critical thinking skill of undergraduate business students, the following are the research objectives:

1. To survey the critical thinking skill of undergraduate business students.
2. To develop and validate the instructional model to enhance the critical thinking skill of the undergraduate business students.
3. To implement and determine the effectiveness of the instructional model.
4. To evaluate the level of satisfaction of undergraduate business students towards the instructional model.

### **Significance of the Study**

Mirroring the rise to prominence of critical thinking throughout educational systems, critical thinking has emerged, during the several past decades, as a salient element of business school pedagogy. This study shall be broadly of significant importance to educators, administrators, learners, and schools at any level in any context as it will provide the following:

1. This study will assist in developing an instructional model for students at any level with the aim of enhancing critical thinking skills.
2. The instructional model will serve as an important tool for assessing and enhancing students' critical thinking skills.
3. The findings from this study will provide guidelines which can be employed in developing curriculum and instruction responding to the needs of business and other students.
4. This instructional model will cater to the needs of the 21<sup>st</sup> century students/learners who are known as digital natives [18].

### **Scope of the Study**

This study was conducted with 40 undergraduate business students enrolled in the Bachelor in Business Administration (B.B.A.) majoring in Human Resource Management who are studying at Naresuan University International College in the first semester of the academic year 2014.

### **Operational Definition**

**Critical thinking skill** refers to the pre-test and post-test scores a student obtained from Watson-Glaser Critical Thinking Appraisal assessing the competencies in three skills referred to as the RED-recognizing assumptions, evaluating arguments, and drawing conclusions, prior and subsequent to using the Blended Socratic Method of Teaching (BSMT) model.

**Undergraduate Business Students** refer to third year students studying Bachelor in Business Administration major in Human Resource Management (HRM)



at Naresuan University International College (NUIC) in the first semester of academic year 2014.

**Socratic Method of Teaching** refers to a dialectic method used as an approach by which one seeks the truth via a process of questions and answers to foster RED-recognizing assumptions, evaluating arguments, and drawing conclusions.

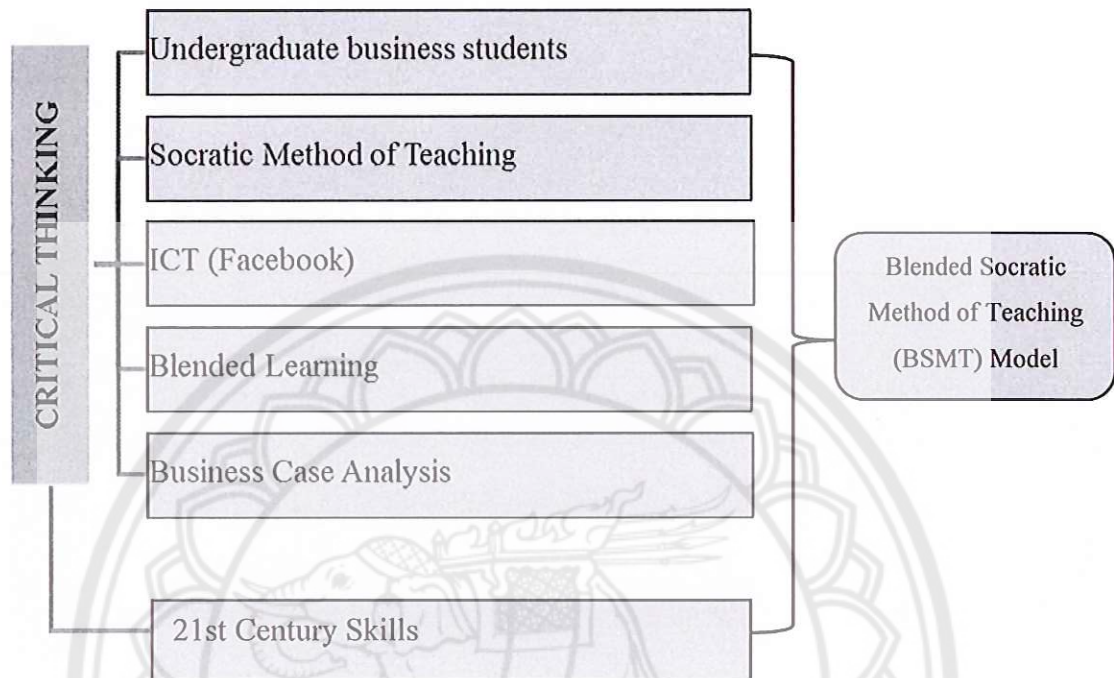
**Blended Learning** refers to a learning approach which combines classroom and Facebook Socratic discussion between and among student-interlocutor and Socratic teacher focusing on business case studies.

**Business Case Analysis** refers to a sample of real-life business situation depicting a factual description of an issue faced by an organization together with the surrounding facts, circumstances, events, and management opinions which requires students to use RED.

**Blended Socratic Method of Teaching (BSMT) Model** refers to a set of inter-related components arranged in sequential order which provides guidelines to teachers to achieve RED. The six components consist of:

1. Focus is to enhance the critical thinking skills of undergraduate business students;
2. Syntax consisting of five steps such as group assignment, analyzing and writing the business case study; presentation of the case study in class; Socratic discussion in class; posting of the case on the class Facebook account; and online Socratic discussion synchronously or asynchronously where continuous feedback of the instructor is present in all stages;
3. The principle of reaction is of a confrontational climate through a dialectic style;
4. The social system is the collaborative and learner-centered where the Socratic teacher act as a 'guide on the side;'
5. Support system includes case studies based on real business situations and using Facebook accounts; and
6. Application to real work setting and new situations developing students' deeper understanding.

### Essential Components of the Study



**Figure 1 Essential Components of the Study**

The above figure presents the core elements that made up the instructional model-Blended Socratic Method of Teaching (BSMT) Model. The model primarily aims to enhance the critical thinking skills-RED (recognizing assumptions, evaluating arguments, and drawing conclusions of undergraduate business students), one of the 21<sup>st</sup> century skills. The BSMT is an authentic and comprehensive instructional model integrating the Socratic method of teaching, Information Communication Technology (ICT) through Facebook, and case study method.



## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE AND RESEARCH**

The purpose of this chapter is of threefold: 1) to review literature on teaching models and their components, critical thinking skills, the Socratic method of teaching, blended learning, the significance of critical thinking to business students, and the necessity of using business case analysis in promoting critical thinking among undergraduate business students; 2) to review related researches relating to the topics mentioned; and 3) to discuss the teaching model.

#### **Teaching/Instruction**

##### **1. Models of Teaching**

The terms strategies, instructional strategies, instructional approaches, and instructional models are sometimes used synonymously. In this review, precise definitions will focus on the concept of models of teaching.

Models of teaching have been defined by researchers and authors in a number of ways. Joyce and Weil [33] have given three meanings: 1) "Teaching models are just instructional designs. They describe the process of specifying and producing particular environmental situations which cause the students to interact in such a way that specific change occurs in his behavior"; 2) in the same year, the terms were defined as "a pattern or plan which can be used to shape a curriculum or course, to select instructional materials and to guide a teacher's actions"; 3) "a model of teaching consists of guidelines for designing educational activities and environments. It specifies ways of teaching and learning that are intended to achieve certain kinds of goals [33]" From the definitions given, it can be summed-up that models of teaching are a set of inter-related components arranged in a sequential order which provides guidelines to teachers to achieve specific goals. It also helps in designing instructional activities and environmental facilities, to carry out these activities and realize the stipulated objectives.



Some other authors called model of teaching an instructional design. According to them, it is the practice of creating "instructional experiences which make the acquisition of knowledge and skill more efficient, effective, and appealing." The process consists broadly of determining the current state and needs of the learner, defining the end goal of instruction, and creating some "intervention" to assist in the transition. It is clear from the definition that models of teaching refers to a process specifying and producing particular situations which cause students to interact in such a way that a specific change occurs in their behavior.

In a similar vein, Paul D. Eggen, et al. [34] defined models of teaching as prescriptive teaching strategies designed to accomplish particular instructional goals. Similar to Joyce and Weil [33], models of teaching are possessing the following features, such as a set of guidelines, pattern, or plan that guide the teacher towards the achievement of certain goal. In simple language, models of teaching may be defined as a blueprint designed to provide necessary structure and direction to the teacher for realizing the stipulated objectives.

From the definition mentioned, models of teaching serve many functions. They help in guiding the teacher to select appropriate teaching techniques, strategies and methods for the effective utilization of the teaching situation and material for realizing the objectives. In relation to it, they help in bringing about desirable changes in the behavior of the learners, which is the main objective of a teaching model, and they help in the proper selection of instruction material for teaching the prepared course or the curriculum.

### **1.1 Types of Teaching Models**

This section discusses the different classification of teaching models. The first classification is the modern teaching models by Joyce, Weil, and Calhoun [34]; second, philosophical teaching models by Israel Scheffler [35]; and third, teaching models by Gunter, Estes and Schwab [36].

#### **Teaching models by Joyce, Weil and Calhoun [33]**

Joyce, et al. [33], published a compendium of teaching models which they categorized into four families: a) the information-processing family; b) the social family, c) the personal family, and d) the behavioral systems family.

### The information-processing family

These models focus on intellectual capacity. They are concerned with the ability of the learner to observe, organize data, understand information, form concepts, employ verbal and nonverbal symbols and solve problems. The primary purposes are: the mastery of methods of inquiry, the mastery of academic concepts and facts, and the development of general intellectual skills such as the ability to reason and think more logically.

It includes:

1. Inductive thinking (classification-oriented) - Hilda Taba
2. Concept attainment - Jerome Bruner
3. The picture-word inductive model - Emily Calhoun
4. Scientific inquiry - Joseph Schwab
5. Inquiry training - Richard Suchman
6. Mnemonics (memory assists) - Michael Pressley,  
Joel Levin,  
Richard Anderson
7. Synectics - William Gordon
8. Advance organizers - David Ausubel

### The social family

The models in this family emphasize the relationships of the individual to the society or other persons. The core objective is to help students learn to work together, to identify and solve problems, either academic or social in nature. The primary goals are: to help students work together to identify and solve problems; to develop skills for human relations and to become aware of personal and social values. It includes:

#### Partners in learning subdivided into

1. Positive interdependence - David Johnson, Roger Johnson,  
Margarita Calderon, Elizabeth  
Cohen
2. Structured inquiry - Robert Slavin
3. Group investigation - John Dewey, Herbert Thelen



- 4. Role playing - Fannie Shaftel
- 5. Jurisprudential inquiry - Donald Oliver and James Shaver

#### The personal family

Models which belong to this family deal with the individual and the development of self-hood. The emphasis of these models is on developing an individual into an integrated, confident and competent personality. They attempt to help students understand themselves and their goals, and to develop the means for educating themselves. The primary goals are: to increase the student's self-worth, to help students understand themselves more fully, to help students recognize their emotions and become more aware of the way emotions effect other aspects of their behavior to help them develop goals for learning, to help students develop plans for increasing their competence, to increase the students' creativity and playfulness, and to increase the students' openness to new experience. It includes:

- 1. Non-directive teaching - Carl Rogers
- 2. Enhancing self-esteem - Abraham Maslow Bruce Joyce

#### The behavioral systems family

All the models in this family share a common theoretical base, a body of knowledge which is referred to as behavior theory. The common thrust of these models is the emphasis on changing the visible behavior of the learner.

The models which belong to this family are:

- 1. Mastery learning - Benjamin Bloom and James Block
- 2. Direct instruction - Tom Good, Jere Brophy, Carl Bereiter, Ziggy Englemen, and Wes Becker
- 3. Simulation - Carl Smith and Mary Smith
- 4. Social Learning - Albert Bandura, Carl Thoresen, and Wes Becker
- 5. Programmed schedule - B.F. Skinner  
(Task performance reinforcement)

### **Philosophical teaching models by Israel Scheffler [35]**

Another type of teaching model is the philosophical teaching model popularized by Israel Scheffler [35]. It includes a) the Impression Model of teaching (John Locke), and b) the Insight model (Plato).

#### **The Impression Model**

This model by John Locke refers to the assumption that the child's brain is empty or blank and whatever is provided through experiences will leave an impression. Such impression is known as learning. In this learning process, the sense organs and the principles of language are given importance. As such, the success in the classroom depends on the teacher's ability and his capability to communicate.

#### **The Insight Model**

According to this model by Plato, it is said to be an answer to the impression model. This model discards the assumptions of impression model that the meaning a teaching model is merely to deliver the knowledge the ideas of a teaching to the mental domains of the students. It is the belief of the insight model that the knowledge cannot be learnt merely through the expressions of sense organs, but knowledge of the content is also essential. Therefore, mental process and language both work together.

### **Teaching models by Gunter, Estes and Schwab [36]**

In their book *Instruction: A Models Approach*, Gunter, Estes and Schwab [36] selected models in ten categories that describe different instructional approaches. These are the Direct Instruction Model, the Concept Attainment Model, the Classroom Development Model, Synectics, the Suchman Inquiry Model, the Classroom Discussion Model, the Vocabulary Acquisition Model; the Cooperative Learning Model; models for memory, and Conflict Resolution Models.

**The Direct Instruction Model.** It is a model developed by Barak Rosenshine as cited in Gunter, Estes and Schwab [36]. It is also similar to the models developed by Anderson, Evertson, Brophy, and Good and Grouws as cited in Gunter, Estes and Schwab [36]. It is presented first because it is essential in planning for any instructional design. This model is most useful in teaching skills that can be broken into small, discrete segments, with each segment building on the prior one. This model



is relatively short instructional periods followed by practice until mastery learning is achieved. Barak Rosenshine as cited in Gunter, Estes and Schwab [36] identified six steps namely: 1) review previously learned material, 2) state objectives for the lesson, 3) present new material, 4) guide practice with corrective feedback, 5) assign independent practice with corrective feedback, and 6) review periodically with corrective feedback if necessary.

**The Concept Attainment Model.** This model developed by Jerome Bruner in 1956 as cited in Gunter, Estes and Schwab [36] is most appropriate for teaching concepts that have clear criteria or attributes. There are nine steps but the first three steps are completed by the teacher prior to instruction. The steps are 1) select and define a concept, 2) select the attributes, 3) develop positive and negative examples, 4) introduce the process to the students, 5) present the example and list the attributes, 6) develop a concept definition, 7) give additional examples, 8) discuss the process with the class, and 9) evaluate.

**The Suchman Inquiry Model [36].** According to the authors, this model is based on the premise that there is indeed a “wilderness of mystery” to be explored in all fields, that every school subject represents what can be called a discipline of inquiry in which all students can participate. The steps involve 1) select a problem and conduct research, 2) introduce the process and present the problem, 3) gather data, 4) develop a theory and verify, 5) state the rules and explain the theory, 6) analyze the process, and 7) evaluate.

**The Classroom Discussion Model.** It is a model conducting classroom discussions based on the preparation of factual, interpretive, and evaluative questions [36]. They added that the steps involved are 1) read the material and prepare the questions, 2) plan and cluster the questions, 3) introduce the model to the students, 4) conduct the discussion, 5) review the process and summarize the students' observation, and 6) evaluate the discussion (optional).

**The Think, Pair, Share Model [37].** It is a simple technique with great benefits. Its use results in increased student participation and improved retention of information. Using the procedure, students learn from one another and try their ideas in a nonthreatening context before making their ideas more public. The steps involved

are 1) teacher poses a question, 2) students think individually, 3) each student discusses his or her answer with a fellow student, and 4) students share their answers with the whole class.

From the above classification, the researcher concluded that every model presented has its objective, the procedure or sequence involved, the support system for students, the principles of reaction or how the teacher will treat students, application, and evaluation. Having said that, the researcher selected two of the models from the compendium of Joyce, Weil, and Calhoun-the Jurisprudential Inquiry Model (JIM) and the Inductive Thinking by Hilda Taba under the information processing family and the social family, respectively.

### **1.2 Components of Teaching Models**

This section focused on the discussion of the essential components or elements of the teaching model presented by Gutner, Estes, and Schwab [36]; and Groccia [38].

According to Joyce, et al. [33] the majority of teaching models are based on the following six elements:

1. Focus
2. Syntax
3. Principles of reaction
4. The social system
5. Support system
6. Application

#### **1. Focus**

Focus is the central aspect of a teaching model. Objectives of teaching and aspects of environment generally constitute the focus of the model. Every teaching model is based on one or the other objective as its focal point. Any teaching model is developed by keeping this focal point in mind. Every teaching model differs from another in terms of its objectives. It is the nucleus of a teaching model. Every model is developed by keeping in view its focal point or objective. Every model has various phases wherein some particular types of competencies are developed by it.



## **2. Syntax**

Syntax of the model describes the model in action. It includes the sequences of steps involved in the organization of the complete program of teaching. It is the systematic sequence of the activities in the model. Each model has a distinct flow of phases. It means the detailed description of the model in action. In it, the teaching activities and interactions between students and the teacher are determined. The syntax of any teaching model means those points which produce activities focused on educational objectives at various phases. Under syntax, the teaching tactics, teaching activities and interaction between a student and the teacher are determined in such a pattern of sequence that the teaching objectives are achieved conveniently by providing desirable environmental situations.

## **3. Principles of Reaction**

Principles of reaction tell the teacher how to regard the learner and to respond to what the learner does. This element is concerned with the way a teacher should regard and respond to the activities of the students. These responses should be appropriate and selective. They provide the teacher with rules of thumb by which to select a model and appropriate responses to what the student does. This element is concerned with the teacher's reaction to the students' responses. In it, he comes to know how he/she has to react to the responses of the students and has to see whether the learners have been actively involved in the process or not.

## **4. The Social System**

This element is concerned with the activities of the student and the teacher and their mutual relationships. Every teaching model has separate objectives and will have therefore separate social systems. It is related to the interactive roles and relationship between the teacher and the student, the kinds of norms that are observed, and student behaviors which are rewarded. The Social system describes the role of and relationships between the teacher and the students. In some models, the teacher has a dominant role to play. In some, the activity is centered on the students, and in some other models the activity is equally distributed. This element is based on the assumption that every class is a miniature society. It also discusses the selection of motivating strategies and tactics for the students. Naturally, the social system occupies

a central position in making the teaching impressive and successful in relation to the previously selected objectives.

### **5. Support System**

The support system describes the supporting conditions required to implement the model. 'Support' refers to additional requirements beyond the usual human skills, capacities and technical facilities usually available in the ordinary classroom. Teacher requirements refer to special skills; special knowledge of the teacher and special audio-visual material like films, self-instructional material, and visits to special place etc. This includes books, films, laboratory kits, reference materials, etc. In it, the evaluation is done by oral or written examination, whether the teaching objectives have been achieved or not. On the basis of this success or failure, a clear idea is achieved regarding the effectiveness of the strategies, tactics and techniques used during teaching.

### **6. Application**

Application is an important element of a teaching model. It means the utility or usage of the learnt material in other situations. Several types of teaching modes are available. Each model attempts to ensure the feasibility of its use in varying contexts related to goal achievements in terms of cognitive and affective behavior modification.

The fundamental elements of the teaching model cited by Joyce, et al. [33] discussed the focus which is considered as the nucleus of every teaching model. Syntax refers to the sequences or pattern where the interaction between teacher and students was described towards producing the desirable behavior. The principle of reaction is the element of the teaching model which focuses on the teacher's reaction to students' responses. The social system is concerned with the activities of students and the teacher and their mutual relationships. Furthermore, the support system where evaluation takes place was described. Lastly, after using the model, how a student can apply the knowledge in other situations which refers to application was also discussed.

Similarly, Gutner, Estes, and Schwab [36] identified six components of teaching models. According to them, the steps involved are interdependent processes and sometimes overlap. Also the steps involved are not a formula to be



followed rigidly or even a series to be completed one after another. They also added that no exact formula or recipe for good instruction exists although good instruction can be founded through proper planning. With these caveats in mind, they identified the following as the components of teaching models:

1. Set goals and develop a rationale for instruction
2. Define objectives
3. Construct a means of evaluation
4. Create units of study that will encompass the content of the course of study
5. Design lessons for instruction using a variety of instructional models.
6. Select instructional materials

#### **1. Describing Educational Goals and Developing a Rationale**

Goals are a general statement of intent that reflects 1) the needs of the learner, 2) the societal purpose of schooling, and 3) the subject matter to be learned. The needs of learners must be the foundation of all instructional planning. No matter how interesting or relevant information may be or how enthusiastic the teacher is about the subject, learners must be willing and able to learn. The teacher must also know the particular group of students that will be taught. It is important to realize too that students learn in different ways and that teachers should have different styles of teaching. Furthermore, special needs must be looked upon as well. On the other hand, societal need refers to broad educational goals that are applicable to all courses and toward which all teachers are expected to direct their instruction. As regards the subject matter content, teachers are guided by national standards, matching content to needs, and the role of the teachers in selecting it.

The rationale for instruction is the fundamental reason for teaching what you want to teach, helping teacher formulate a statement of justification for any course or subject. Such an exposition of the logical basis behind particular objectives and teaching specific content is a rationale.

## **2. Determining Learning Outcomes**

The learning objective is a specific statement of the measurable learning that is intended to take place as a result of instruction. Objectives should be written in every level of the planning process. They involve three basic types: 1) cognitive, 2) affective, and 3) psychomotor. Cognitive objectives describe the knowledge that learners are to acquire. Affective objectives describe the attitudes, feelings, and dispositions that learners are expected to develop. Finally, psychomotor objectives relate to the manipulative and motor skills that learners are to master.

## **3. Evaluation Strategies**

The evaluation strategies should be consistent with the learning objectives. It is a continuing process that allows the teacher to make correction to achieve success. The crucial feature of all evaluation is validity. The evaluation tool must accurately portray the intended learning outcome.

## **4. Organizing Content**

The design of a course consisting of units and lessons is one of the most rewarding professional experiences for an instructor. Because so much content in every subject could be included, the instructor must decide what to retain, what to omit, what to emphasize, the order in which to present the material, and whether to begin with the general and work to the specific or vice versa.

## **5. Developing Lesson Plans**

Lesson plans are the component parts of the unit design. Just as a course is divided into units, units are divided into lessons. A lesson plan may span several days or it may take only one day. In deciding how many lesson plans are necessary to accomplish the unit objectives, it may be necessary to rethink and modify the unit objectives because they may be prove too ambitious or too limited. Furthermore, each lesson should be a logical part of the unit plan.

## **6. Selecting Instructional Tools**

This refers to the criteria for choosing textbooks and supplementary materials. The important criteria for evaluating instructional materials are 1) emphasis, 2) unity, 3) coherence, 4) repetition and elaboration, 5) appropriate vocabulary, 6) audience appropriateness, 7) format, and 8) caliber of questions. A teacher should



remember that no matter how appropriate the rationale for the course or objectives of a lesson, if the instructional materials are inappropriate, learning will be impeded. Furthermore, given the range of interests and abilities of students in a typical classroom, no single information source could possibly serve every student.

In the above discussion of Gutner, et al. [36], components of a teaching model during the planning phase of instruction were defined. Goals, needs, and objectives were defined and rationale was described. In addition, evaluation strategies for different types of objectives were described. An organizational strategy for unit and lesson planning, together with a description of the processes necessary for selecting instructional material was included as well.

On the other hand, Groccia [38] who used the principles of backward course design identified seven components of a teaching model for understanding teaching and learning. The seven components are as follows:

1. Learning outcomes
2. Instructional processes
3. Course content
4. Teacher characteristics
5. Student characteristics
6. Learning process
7. Learning context

#### **1. Learning Outcomes**

Groccia [38] also called it product variable and serves as the foundation into which all other components or variables rest. It determines what students are supposed to learn. It could be short-and long-term learning goals and outcomes of the instructional experience.

#### **2. Instructional Processes**

Also known as process variables represent what the teacher and students do: the teaching and learning behaviors, techniques, and methods.

#### **3. Course Content**

It represents one of the preliminary variables according to Groccia [38].

#### **4. Teacher Characteristics**

Also known as instructor variables, they emphasize that instructors need to understand who they are, and what they bring to the learning situation. The more the instructors understand themselves, the better able they will be to capitalize on their strengths, minimize their weaknesses, and ultimately improve their teaching and students' learning.

#### **5. Student Characteristics**

A third set of variables relates to the learner. Armed with an understanding of the learners, through frequent and regular assessments, faculty members are better able to develop learning activities that are accessible to students in ways that are appropriate to their skills, interests, and needs.

#### **6. Learning Process**

It represents one of the preliminary variables of the model.

#### **7. Learning Context**

It also represents one of the preliminary variables of the model which is necessary for the determination of the learning outcomes.

Groccia's model for understanding teaching and learning consists of seven interrelated components where the principles of backward course design were used. The learning outcome serves as the foundation into which all other components or variables rest. He also described all the components of the model.

Groccia's model is slightly different from the components cited by Joyce et al. and Gutner et al. Differences lay on identifying separately learning and instructional process variables. One must remember that teaching and learning are inseparable; hence, they must be discussed and considered together. Another difference was the student and teacher's variables. These components are first and foremost considered in the planning phase of instruction which is the other way around in the case of Groccia's model.



## 2. Critical Thinking

### 2.1 Critical Thinking Defined

Critical thinking has been variously defined with some focusing on its attributes or components while others focus on its applicability. From the earliest time, John Dewey broadly defined critical thinking as, “active, persistent and careful consideration of a belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends” [39]. On the other hand, [40] narrowly defined critical thinking which 1) focuses on one’s experience as an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one’s experience, 2) knowledge of the methods of logical enquiry and reasoning, and 3) some skill in applying those methods. Critical thinking calls for a persistent effort to examine any belief or supposed form of knowledge in the light of the evidence that supports it and the further conclusions to which it tends.

Later, Robert Ennis [41] specifically defined critical thinking with some points of similarity to Dewey and Glaser. He developed a fundamental theory suggesting that critical thinking is taken to be “the correct assessing of statement”. He developed a comprehensive list of twelve aspects of critical thinking, which he categorized according to three dimensions: the logical (understanding relationships between meanings of words and statements), the criterial (having knowledge of the criteria for judging statements), and the pragmatic (judging sufficiency in light of the purpose of the judgment). Ennis [42] subsequently broadened the scope of critical thinking, and by 1985 he was defining critical thinking as “reasonable reflective thinking that is focused on deciding what to believe or do”. The list of abilities he proposes as basic to critical thinking is categorized under the headings elementary clarification, basic support, inference, advanced clarification, and strategies and tactics. They include the following: 1) focusing on a question, 2) analyzing arguments, 3) asking and answering questions of clarification and challenge, 4) judging the credibility of a source, 5) observing and judging observations reports, 6) deducting and judging deductions, 7) inducing and judging inductions, 8) making and judging value judgments, 9) defining terms and judging definitions, 10) identifying assumptions, and 12) interacting with others. Ennis also views judgment as necessary to critical

thinking. The definition by Ennis is characterized by some authors as limiting as it does not fully consider the reflective elements of later constructs [32].

Another well-known proponent of critical thinking, Robert Paul, viewed critical thinking in accordance with two components: strong sense and weak sense critical thinking. In the weak sense, critical thinking skills are seen as extraneous to the person, which can serve as an adjunct to other learning. Strong sense critical thinking skills allow one to view their cognitive processes. This is an entirely different definition compared to Dewey [39], Glaser [40], and Ennis [41], as he presented two components of critical thinking.

Lipman [43] on the other hand is quite similar to Paul [44] as he focused on the extraneous aspect of a person. He believed that critical thinking was “skillful, responsible thinking that facilitates good judgment because it relies upon facts, is self-correcting, and is sensitive to context”.

In 1990, the Delphi Report differentiated from the above definition as the expert consensus defined critical thinking specifically for purposes of educational assessment and instruction. Critical thinking was defined as purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or contextual considerations upon which that judgment is based. The report added that CT is essential as a tool of inquiry. As such, CT is a liberating force in education and a powerful resource in one's personal and civic life. While not synonymous with good thinking, CT is a pervasive and self-rectifying human phenomenon. The ideal critical thinker is habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgments, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit. Thus, educating good critical thinkers means working toward this ideal. It combines developing CT skills with nurturing those dispositions which consistently yield useful insights and which are the basis of a rational and democratic society [45].



Halpern defined critical thinking as a form of cognition which is purposeful and goal-oriented. He defined it as the use of cognitive skills or strategies that increase the probability of a desirable outcome. It is used to describe thinking that is purposeful, reasoned, and goal directed-the kind of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions, when the thinker is using skills that are thoughtful and effective for the particular context and type of thinking task.

Justin Menkes [46] and John Chafee [47] similarly defined critical thinking as a form of cognition like Halpern [48]. They all mentioned using critical thinking in choosing the best decision under certain situations. Justin Menke [46] defined critical thinking as cognitive skills that determine how well someone gathers, processes, and applies information in order to identify the best way to reach a particular goal or navigate a complex situation, whereas, John Chafee [49] defined critical thinking as a purposeful, organized cognitive process that we use to understand the world and make informed decisions. A critical thinker is someone who has developed a knowledgeable understanding of our complex world, a thoughtful perspective on important ideas and timely issues, the capacity for penetrating insight and intelligent judgment, and sophisticated thinking and language abilities [49].

There is no universal definition of critical thinking. Despite this, there are still common aspects that overlap. One could easily notice that although definitions mentioned above are phrased in different wordings concepts common to current definitions of critical thinking include using reasoning/logic, judgment, metacognition, and reflection and questioning [48]. As such, the researcher adopted a definition that will sum up the different definitions mentioned above. The definition called the RED Model is adopted in this study.

From the various definitions given above, critical thinking could be summed as follows: Not just only thinking, but it is a special kind of thinking and a skill. It is a form of cognition which is characterized as disciplined, self-directed, reflective, analytical, dialectical, synthesizing, apprehensive of the limits of one' own thinking, and meta-thinking. Also, it seeks to be an ultimate tool in problem solving and decision making in a certain context or situation

## 2.2 Critical Thinking Models

In order to better explain critical thinking skills, its models shall be discussed according to their different dimensions. The models to be discussed are Paul-Elder Critical Thinking and the RED Model of Critical Thinking.

### Paul-Elder's Critical Thinking Framework [50]

The Paul-Elder framework has three components: the elements of thought (reasoning), the intellectual standards, and the intellectual traits as shown in Figure 1.3 below. Each trait will be discussed exhaustively.

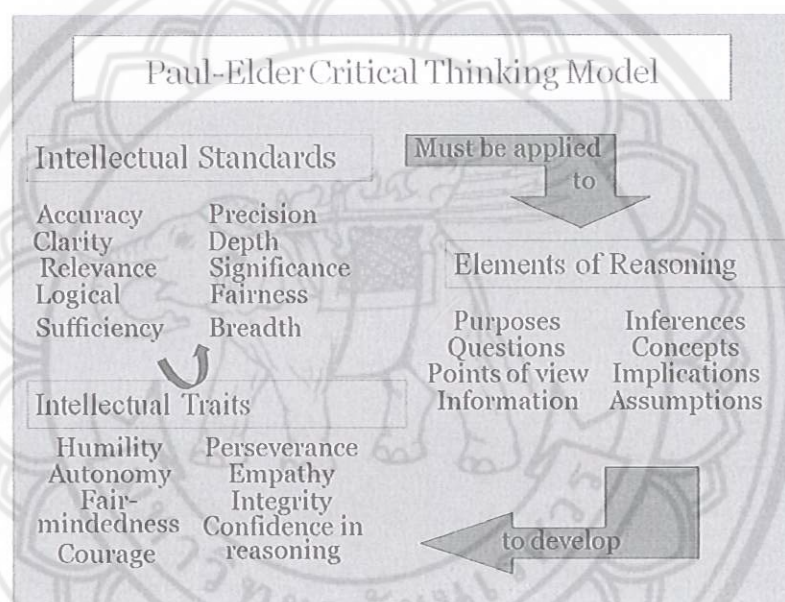
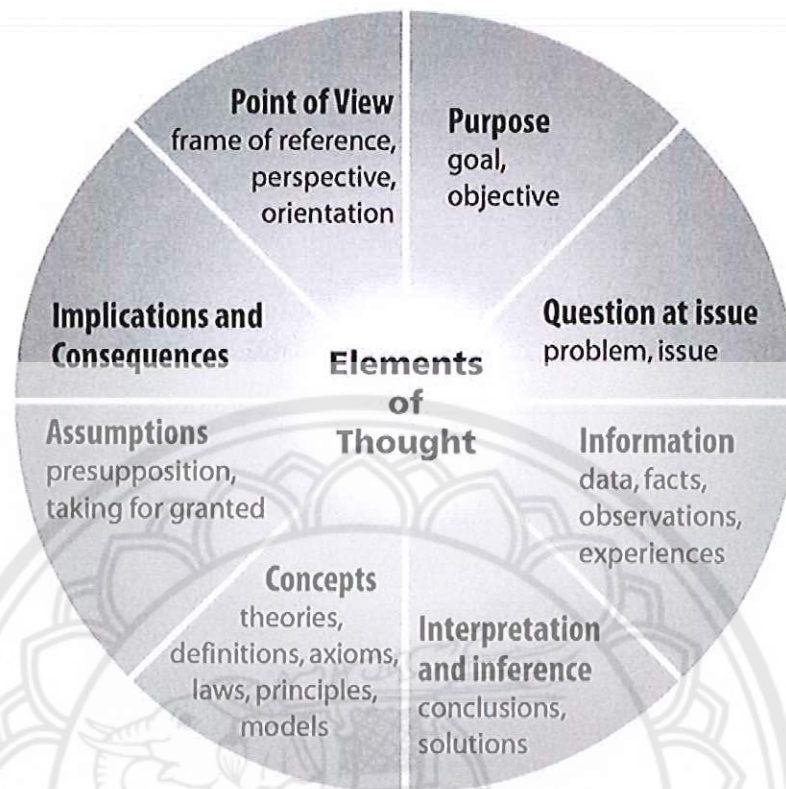


Figure 2 Paul-Elder's Critical Thinking Model

### Elements of Thought

Within Paul-Elder's framework, one part is the so-called elements of thought (elements of reasoning). With these, Paul said that human thinking is composed of or presupposes eight elements. Paul and Elder said that "each of these structures has implications for each other" [51]. These elements of thought are illustrated in the form of a circle (Figure 1.4) to illustrate their non-linear nature as well as their interdependence.





**Figure 3 Elements of Thought**

#### Intellectual Standards

Intellectual standards must be applied to thinking whenever one is interested in checking the quality of reasoning about a problem, issue, or situation [52], which means high level reasoning requires critical evaluation. The intellectual standards listed by Paul-Elder are not exhaustive.

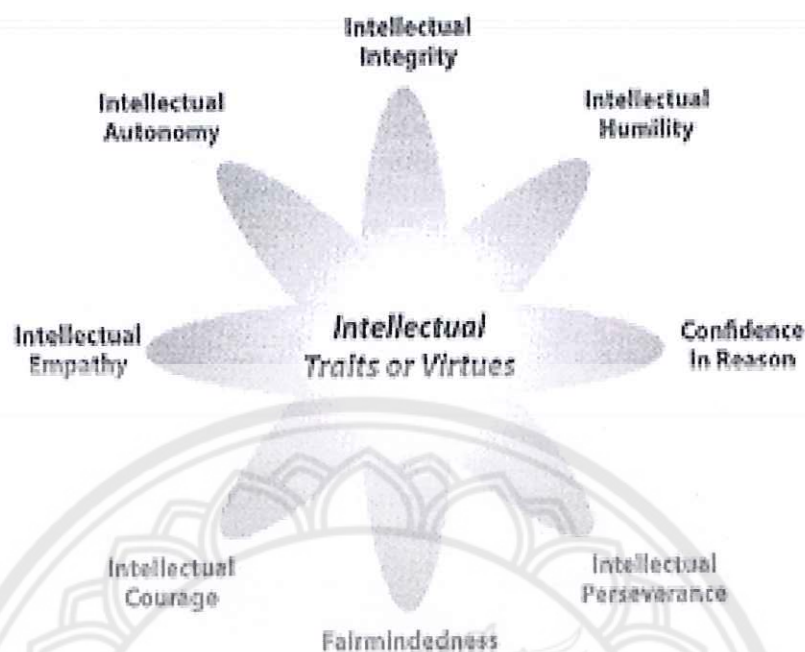
<b>Clarity</b>	<p>Could you elaborate further?</p> <p>Could you give me an example?</p> <p>Could you illustrate what you mean?</p>
<b>Accuracy</b>	<p>How could we check on that?</p> <p>How could we find out if that is true?</p> <p>How could we verify or test that?</p>
<b>Precision</b>	<p>Could you be more specific?</p> <p>Could you give me more details?</p> <p>Could you be more exact?</p>
<b>Relevance</b>	<p>How does that relate to the problem?</p> <p>How does that bear on the question?</p> <p>How does that help us with the issue?</p>
<b>Depth</b>	<p>What factors make this a difficult problem?</p> <p>What are some of the complexities of this question?</p> <p>What are some of the difficulties we need to deal with?</p>
<b>Breadth</b>	<p>Do we need to look at this from another perspective?</p> <p>Do we need to consider another point of view?</p> <p>Do we need to look at this in other ways?</p>
<b>Logic</b>	<p>Does all this make sense together?</p> <p>Does your first paragraph fit in with your last?</p> <p>Does what you say follow from the evidence?</p>
<b>Significance</b>	<p>Is this the most important problem to consider?</p> <p>Is this the central idea to focus on?</p> <p>Which of these facts are most important?</p>
<b>Fairness</b>	<p>Do I have any vested interest in this issue?</p> <p>Am I sympathetically representing the viewpoints of others?</p>

**Figure 4 Intellectual Standards**

### Intellectual Traits

Paul and Elder [50] argued that schooling which does not foster the below habits of mind often tacitly encourages the opposites. In addition, these intellectual traits are associated with a cultivated critical thinker that results from the consistent and disciplined application of the intellectual standards to the elements of thought.





**Figure 5 Intellectual Traits**

Paul and Elder's model exemplify quite a detailed description of critical thinking compared to the RED Model. The RED Model conceptualizes briefly and clearly in an understandable manner the three elements: elements of thought, intellectual standards, and intellectual traits. On the first element of the RED Model: in recognizing assumptions, these entail all the elements of thought (reasoning) such as purpose, question at issue, information, interpretation and inference, concepts, implications and consequences, and point of view. In evaluating arguments the following elements of intellectual standards must be present: clarity, accuracy, precision, relevance, depth, breadth, logic, significance, and fairness. Finally, in drawing conclusions, the intellectual traits and virtues are also present in arriving at a conclusion.

### The RED Model of Critical Thinking

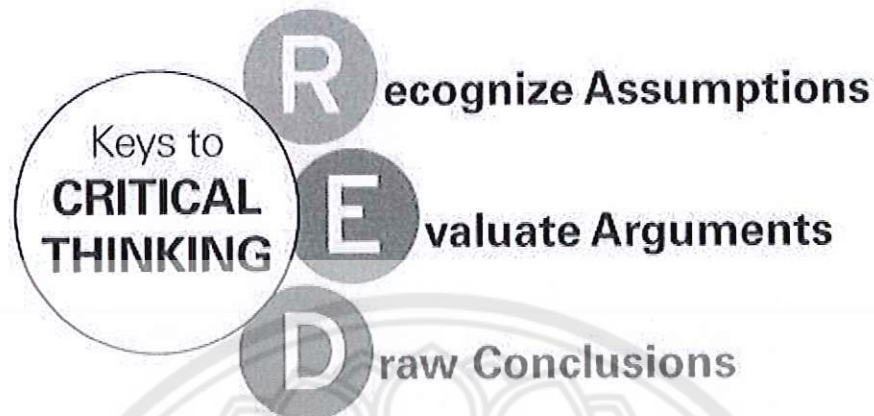


Figure 6 RED Model of Critical Thinking

The RED Model which stands for Recognize assumptions, Evaluate arguments, Draw conclusions, was developed by Pearson Education, Inc. and applies critical thinking when faced with a decision [53]. The RED model lays out a path for understanding how critical thinking works. Steve Piscitelli [54], a recognized teacher and author, reiterated that the RED Model is an effective and powerful critical thinking tool that provides a systematic, step-by-step process for examining issues, events, people, and problems.

The three essential elements of the RED Model are discussed below:

**Recognize assumptions.** This element of the RED model of critical thinking is the ability to separate fact from opinion [53]. Assumption, according to Piscitelli [54] is an inference, an opinion, or a belief about (among other things) a person, place, or philosophical position. He added that a person must have the ability to separate fact from fiction.

**Evaluate Arguments.** This ability entails analyzing information objectively and accurately, questioning the quality of supporting evidence, and understanding how emotion influences the situation [53]. Common barriers include confirmation bias and coming to a conclusion to avoid conflict. Confirmation bias, according to Piscitelli [54], happens when people lean toward or agree with only



information that confirms already held personal beliefs and overlook or dismiss anything that may challenge or disprove someone's opinion.

Draw conclusions. It is the ability to bring diverse information together to arrive at conclusions that logically follow from available evidence without generalizing beyond the evidence [53].

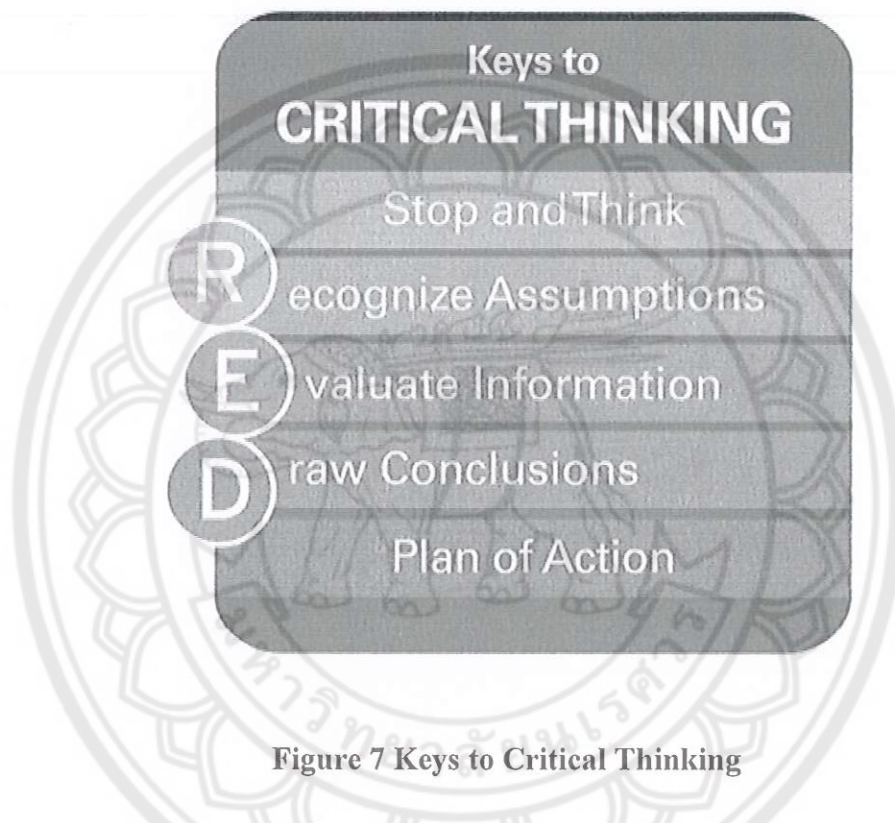


Figure 7 Keys to Critical Thinking

Piscitelli [54] evidently supported the RED model of thinking in his graphic model above. He added two other most prior and after important aspects of critical thinking: stop and think and plan of action.

What is important about the Red Model is a process that is fluid and sequential process. According to its proponents, with concentrated practice over time critical thinking skills can be significantly increased [53]. Aside from the reason mentioned above, the model gave a straightforward solution of improving critical thinking skills for employees in the workplace. According to the U.S. Department of Labor, critical thinking is the raw material of a number of workplace skills, such as problem solving, decision making, organizational planning, and risk management [53].

According to the study conducted by Pearson Education [55], as well as by a variety of independent academics, people who score well on critical thinking assessment are also rated by their supervisor as having:

- ✓ Good analysis and problem-solving skills.
- ✓ Good judgment and decision making.
- ✓ Good overall job performance.
- ✓ The ability to evaluate the quality of information presented.
- ✓ Creativity.
- ✓ Job knowledge.
- ✓ The potential to move up within the organization.

The reasons mentioned above summarize the important reasons why the RED Model is used in this study.

In order to better understand the use of the RED model of critical thinking, it is important to look at what questions to consider when problem solving [55].

In recognizing assumptions, the following questions should be asked:

1) What is the key issue/problem that you are trying to solve; 2) What information and facts do you have about this issue; 3) What are the ideas and assumptions that support your strategy or plan; 4) Is there solid evidence to support those assumptions, and what might be some gaps in your reasoning; 5) Who are the key stakeholders and what are their viewpoints; 6) What other ideas should be explored; 7) What else do you need to know?

Furthermore, in evaluating arguments, the questions are as follows:

1) What are the pros and cons on the solution you are proposing; 2) What are your biases; 3) Is there someone who has a different opinion that you could run your ideas by; 4) What impact will your decision have on others and how will you handle this; 5) What will be the financial impact of your decision; 6) Who would disagree with your proposed solution and what is the rationale that supports their viewpoint; and 7) What key points or perspectives do you need to keep in mind as you evaluate the options?



Finally, in drawing conclusions, the following questions should be considered: 1) After evaluating all of the facts what is the best possible conclusion; 2) What specific evidence is driving your conclusion; 3) Is there new evidence that would impact your decision; 4) What does your common sense and experience tell you to do; 5) What is the timeline for making decision (e.g., would your decision be different in a month); 6) What opportunities does your conclusion provide; and 7) What risks are associated with your conclusion?

This discussion summed-up that the BSMT model integrated the key elements of critical thinking enshrined in the RED model. Analyzing the advantages and disadvantages of using the Paul-Elder Critical Thinking Framework and the RED Model, it can be seen that the advantage of using the first model is that the framework discusses in detail the different components of critical thinking (elements of thought, intellectual standards, and intellectual standards) while its disadvantages are 1) critical thinking is not about precision as stated in the framework; and 2) the elements overlap with other higher order thinking. On the other hand, the RED Critical Thinking Model was used in this study because it is 1) a brief and comprehensive model in enhancing critical thinking; 2) easy to understand core elements of critical thinking; 3) the application of the model emphasizes real-life situation; and 4) its use is supported by internationally recognized appraisal tools. However, the model is not perfect in itself as 1) it does not include any intellectual traits; and 2) the model did not elaborate what specific traits will be developed.

The given advantages and disadvantages of the two critical thinking models are not exhaustive. In the point of view of an instructor who is not well acquainted in teaching critical thinking, the RED critical thinking model is more practical to use. The RED model is supported by well-tested critical thinking appraisal tools which are international recognized and used by educational institutions and organizations diversified settings.

Paul-Elder's critical thinking framework is no doubt an excellent guide in understanding and developing critical thinking skills. However, this model poses several problems to those who are not well-versed in teaching critical thinking.

### 2.3 Critical Thinking Tests

There are a number of critical thinking tests available, however the five most commonly used tests will be discussed in this section. The discussion here will be according to Robert H. Ennis [56], Professor Emeritus at University of Illinois.

The California Critical Thinking Skills Test (CCST) and the California Critical Thinking Dispositions Inventory: According to Robert H. Ennis [56], these tests were developed by Peter Facione [57]. The first test is aimed at college students, but probably usable with advanced and gifted high school students. It consists of multiple-choice questions, incorporating interpretation, argument analysis and appraisal, deduction, mind bender puzzles, and induction, including rudimentary statistical inference. The second test also consists of multiple-choice questions which attempt to assess critical thinking dispositions. It is probably useful for self-appraisal and anonymous information for use in research.

Cornell Critical Thinking Test, Level X and Cornell Critical Thinking Test, Level Z: Both tests were developed by Robert H. Ennis and Jason Millman [42]. The first test is aimed at Grades 4-14 students. It consists of multiple-choice questions, sections on induction, credibility, observation, deduction, and assumption identification. On the other hand, the Level Z test is aimed at college students and adults, but usable with advanced or gifted high school students. It consists of multiple-choice questions, sections on induction, credibility, prediction and experimental planning, fallacies especially equivocation, deduction, definition, and assumption identification.

Ennis-Weir Critical Thinking Essay Test (EWCTET): This test was developed by Robert H. Ennis and Eric Weir in 1980. It is a general test of critical thinking ability in the context of argumentation, and it is intended to be used for both formative and summative evaluations and also as teaching material [58]. The test incorporates getting one's point, seeing the reasons and assumptions, stating one's point, offering good reasons, seeing other possibilities (including other possible explanations), and responding to and avoiding equivocation, irrelevance, circularity, reversal of an if-then (or other conditional) relationship, overgeneralization, credibility problems, and the use of emotive language to persuade. In this test, the participants



have to write a letter to an editor of a fictional newspaper for 40 minutes. In the letter, the writer offers a variety of arguments in support of it. There are eight paragraphs in total; each paragraph exemplifies at least one of the errors of reasoning.

The essay test provides criteria and scoring guidelines Ennis and Weir [42]. The students' responses are graded according to a score of -1, 0, 1, 2, or 3 given for each of the first eight numbered paragraphs.

-1 judges incorrectly (good or bad) C

-1 shows bad judgment in justifying 0 makes no response

0 makes no response D

+1 judges correctly (good or bad), but does not justify C

+2 judges semi-adequately

+3 justifies adequately

For Paragraph Nine, the range is -1 to +5.

Halpern Critical Thinking Assessment (HCTA): It is a critical thinking test developed by Diane F. Halpern [59]. According to the author, it is to be used in assessment of critical thinking skills for respondents aged 15 years and older. The test has two different forms: S1: Standard version, which requires constructed response and multiple – answers and S2: Multiple-choice short version. The HCTA is considered the first test that enables a content-representative assessment of recognition and recall aspects of critical thinking [59].

The Watson-Glaser Critical Thinking Appraisal (WGCTA): Finally, the last critical test that will be presented is the test that will be used in this study. The Watson-Glaser Critical Thinking Appraisal (WGCTA) was developed in 1980 by Goodwin Watson and Edward Maynard Glaser [60]. The test consists of 80 multiple-choice sections on induction, assumption identification, deduction judging, and argument evaluation. It could be completed in 50 minutes. Furthermore, this test has internationally recognized reliability and validity ensuring that this tool is one of the most trusted instruments available in diversified settings. Similarly, according to the Center for the Study of Higher Education [61], the WGCTA is classified as a Type A instrument which focuses on a few elements and standards of thinking and seeks a single answer. The WGCTA awards one point for every correct answer.

The WGCTA was chosen because of its published reliability and validity in measuring critical thinking skills in numerous researches [62]. Another reason was all the essential elements of the RED Model of critical thinking which is one of the theoretical foundations of this research are present in WGCTA. The essential elements are recognizing assumptions, evaluating arguments, and drawing conclusions.

The test was likewise supported by much evidence attesting to the validity of the test in measuring critical thinking. In one study, the correlation between course grades and total test scores was .41,  $p < .01$ . The test has external validity in that the item responses are similar to typical instances of critical thinking [62].

#### **2.4 Education and Critical Thinking**

If employers want critical thinkers, and colleges and universities want to produce critical thinkers, but both agree the current wave of students is deficient in this area, 'The question becomes who is responsible for imparting critical thinking?' [32]. Employers overwhelmingly believe the responsibility is with the four-year colleges and universities [63].

As early as the 1930s, Osborne [64] stated that one of the major goals of education should be to develop 'thought power' in students. Nowadays, imparting knowledge may no longer serve society well. Fortunately, much of the recent educational focus has shifted away from the brain-processor model [65] to teaching general thinking skills [32]. It is important to note that the general consensus is that the educational system has not performed well in consistently producing critical thinkers [66, 67, 68].

#### **2.5 Theoretical Foundation of Models of Teaching that Promotes Critical Thinking Skills**

This section will discuss the different types of teaching models and their fundamental elements that promote critical thinking skills. There are five models, namely: 1) Jurisprudential Inquiry Model developed by Donald Oliver and James Shaver in 1971; 2) Inductive Thinking Model by Hilda Taba in 1966; 3) Group Investigation Model by John Dewey and Herbert Thelen in 1916 and 1960, respectively; 4) Advance Organizers Model by David Ausubel in 1963; and



5) Synectics Teaching Model by William J.J. Gordon and Goerge Prince in 1960 as cited in the Joyce, et al. [33].

### **Jurisprudential Inquiry Model (JIM)**

This model centers on learning to think about social policy. This model belongs to the Social Family by Donald Oliver and James Shaver, 1971 as cited in the Joyce, et al. [33].

Jurisprudence means the science or philosophy of law or the knowledge or skill to deal with issues in legal fashion. Oliver and Shaver, 1974 created this method meaning a jury process of resolving complex issues related to social problems. In simpler words, it is a process of inquiry for solving issues as is held by judges in courts of law. The judge first of all listens to the case presented by the parties involved which is followed by evidence, then analyzes the legal position taken by both sides, weighs these positions and evidence, assesses the meaning and position of law, and finally makes the decision. When a similar role is played by the teacher along with the students in the classroom to analyze the social problem or public policy issues, then it becomes a jurisprudential way of teaching. This model helps the students in understanding the complexity of the problems so that they can make their position reflect that complexity. The main purpose of this method is to help students learn how to formulate defensible stances on public policy issues.

Following this model, the students get opportunities to develop public policy stances and dialogue skills. During the process of dialogue, a student takes a position and the teacher challenges the position with questions, hence dialectic. The teacher's questions are designed to push students' thinking about their position and to help them learn. The teacher orients the class to the case and students usually become emotionally involved in the analysis, making the discussion intense and personal. With more practice, it is hoped that their positions will eventually become more complex and well formulated. In a nutshell, the specific features of this model help the students to develop competency in social dialogue and comprehend the values involved in a particular social situation.

The assumptions of this model are as follows: 1) that social values legitimately conflict with one another; b) negotiations of difference can help to resolve

complex and controversial issues; 2) a skillful citizen is like a competent judge. He/she listens to the evidence, analyzes the legal positions taken by both sides, weighs these positions and the evidence assess the meaning provisions of the law, and finally makes the best possible decision; and 3) there are three types of competencies required to play the role namely:

1. familiarity with values,
2. skills for clarifying and resolving issues, and
3. knowledge of contemporary political and public issues.

### **Components of the Jurisprudential Inquiry Model**

The teaching model has the following elements [33]:

#### **1. Focus**

This model is based on a conception of society in which people differ in their views and priorities and in which social values legitimately conflict with one another. Resolving complex, controversial issues within the context of productive social orders requires citizens who can talk to one another and successfully negotiate their differences. In order to play the role of an inquirer three types of competence are required: familiarity with values, competence to think systematically and resolve issues, and knowledge of contemporary political and public issues.

#### **2. Syntax**

Confrontational dialogue is the heart of the jurisprudential inquiry model. However, other important activities, such as helping students to formulate a stance and helping them revise their position after the argumentation. The model has six phases namely:

This refers to the sequence of steps involved in this model.

#### **Phase One: Orientation to the case**

1. Teacher introduces materials
2. Teacher review facts

#### **Phase Two: Identify the issues**

1. Students synthesize facts into policy issues
2. Students select one policy issue for discussion
3. Students identify values and value conflicts



#### 4. Students recognize underlying factual and definitional questions

##### Phase Three: Taking positions

1. Students articulate a position
2. Students state the basis of a position in terms of social value and

consequences of decisions

##### Phase Four: Exploring the stance(s), patterns of argumentation

1. Establish the point at which the value is violated
2. Provide the desirable or undesirable consequences
3. Clarify one value conflict with analogies
4. Set priorities. Assert the priority of one value over another

##### Phase Five: Refining and qualifying the position

1. Students state positions and reasons for positions and examine a number of similar situations.

2. Students qualify positions

##### Phase Six: Testing factual assumptions behind qualified positions

1. Identify factual assumptions and determine if they are relevant
2. Determine the predicted consequences and examine their factual validity (will they actually occur).

The six phases of JIM can be divided into: analysis (Phases 1, 2, 3) and argumentation (Phases 4, 5, 6).

#### 3. Social system

The teacher begins the task and then students take over. The structure in this model ranges from high to low. At first, the teacher initiates the phases, and the students should be able to carry out the process unassisted. The social climate is vigorous and confrontational but in a non-threatening manner.

#### 4. Principles of Reaction

##### 4.1 Maintain a vigorous intellectual climate

##### 4.2 Respect all views and avoid direct evaluation of student

opinions

##### 4.3 See that issues are thoroughly explored

4.4 Probe for relevance, consistency, specificity, generality, definitional clarity and continuity.

4.5 Avoid taking a stand

4.6 Maintain a dialectical style

## 5. Support system

It includes sourced documents that focus on a problem situation. The distinguishing feature of this approach is that the case is an account of real or hypothetical situations. It is essential that all pertinent facts of the situation be included in the case material so the case will not be vague and frustrating.

## 6. Application

This model is tailored to older students. It serves as a framework for developing course content in public affairs (cases involving public issues) and for developing a process to deal with conflict in the public domain, leading students to an examination of values. This model uses confrontational dialogue that surrounds the argumentation of social issues. In order to achieve skills in reasoning and for confidence to take a stance, teachers should let a single case continue for a long period of time, giving students the opportunity to acquire investigative and action strategies.

### **Inductive Thinking Model**

Another teaching model that promotes critical thinking is the Inductive-Training Model developed by Hilda Taba [69]. McBride, Gabbard and Miller [70] identified this model as promoting critical thinking. In addition, Taba [69] identified three inductive thinking tasks for the collection, organization, and manipulation of data. They include 1) concept formation, 2) interpretation of data, and 3) application of principles.

According to Joyce, et al. [33], students are natural conceptualizers all the time, comparing and contrasting objects, events, emotions-and everything. Learning how to think inductively is the critical goal. In order to achieve it, there are three guidelines shaping the Inductive Training model environment: 1) focus-helping students to concentrate on a domain or an area of inquiry they can master without constricting them so much that they can't use their full abilities to generate ideas;



2) conceptual control-helping students to develop conceptual mastery of the domain, and 3) converting conceptual understanding to skill.

Similarly, Joyce, et al. [33] said that the environment of the model is made up of the development of the learning community, the creation of data sets, and the learning tasks-classification, reclassification, and development of hypotheses. Also, the teacher observes the students and scaffolds their inquiry by helping them elaborate and extend their concepts.

Thus, the inductive model causes students to collect information and examine it closely, to organize the information into concepts, and to learn to manipulate those concepts. Joyce, et al. [33] added that if used regularly, this strategy increases students' abilities to form concepts efficiently and increases the range of perspectives from which they can view information.

The same authors also raised the questions about the model, focusing on whether the model will inhibit mastery of the content to focus on how to increase students' ability to form and use concepts and hypotheses. However, several researches were presented where students showed student achievement.

### **Components of the Inductive Thinking Model**

#### **1. Syntax**

The inductive model has a rolling structure that evolves over time, and its essence is the continual collecting and shifting of information; the construction of ideas, particularly categories, that provide conceptual control over territories of information; the generation of hypotheses to be explored in an effort to understand relationships better or provide solutions to problems; and the conversion of knowledge into skills that have practical application. As such, the model has four phases which include: 1) identifying and enumerating the data that are relevant to a topic or problem, 2) grouping these items into categories whose members have common attributes, 3) interpreting the data and developing labels for the categories so that they can be manipulated symbolically, and 4) converting the categories into skills or hypotheses [33].

## 2. Social System

The atmosphere of the classroom is cooperative with a good deal of students' activity. The teacher is generally the initiator of phases, and the sequence of the activities is determined in advance. He or she begins in a controlling though cooperative, position. However, as the students learn the strategies, they assume greater control.

## 3. Principles of Reaction

The teacher matches tasks to students' level of cognitive activity and determines students' readiness. As such, when using cognitive tasks within each strategy, the teacher must be sure that the cognitive tasks occur in optimum order and also at the "right" time.

## 4. Support System

Students need raw data to organize and analyze. The model can be used in any curricular area that has a large amount of raw data that needs to be organized.

## 5. Application

The primary application of the model is to develop thinking capacity. However, in the course of developing thinking capacity, the strategies obviously require students to ingest and process large quantities of information. The model can be used in every curriculum area.

Thus, the inductive model of learning and teaching is designed to instruct students in concept formation and, simultaneously, to teach concepts and the application of concepts/generalizations. It nurtures attention to logic, attention to language and the meaning of work, and attention to the nature of knowledge.

## **Group Investigation Model**

Another teaching model that enhances critical thinking skills is the Group Investigation Model [70]). John Dewey [71] originally developed the model and later on it was refined by Herbert Thelen [72], and it belongs to the social family of Joyce, et al.'s [33] models of teaching. Central to this model is the use of the democratic process with the process of academic inquiry [33]. McBride, et al., [70] added that this framework posits that life is social and one cannot act without



reference to others. Thus, all members must function in unison and maintain order. Since the classroom represents a microcosm of a larger society, the classroom setting will exhibit a miniature democracy where students can solve problems, attack problems and acquire new knowledge. Simply stated, the classroom is analogous to the larger society, and this model of teaching replicates the negotiation pattern needed by society.

### **Components of the Group Investigation Model**

#### **1. Focus**

According to Thelen [72], it is a framework which seeks to stimulate inquiry upon students on a problem presented to them. The purpose of the cooperative inquiry in a group is to combine complex social and academic tasks to generate academic and social learning. He added that the heart of group investigation lies in the formulation of inquiry. Also, students must develop the capacity for reflection, the ability to synthesize, and the ability to formulate conclusions. Through the social process, new data are generated, resulting in data assessment, concept formation, and hypothesis formation and testing, and analyzing alternative courses of actions-all key critical thinking skills.

#### **2. Syntax**

This model consists of six phases which begins by confronting the students with a stimulating problem, which is presented verbally, or it may be an actual experience [33]. The situation may naturally arise or may be provided by a teacher. Phase two, students explore reactions to the situations. Phase three, students formulate study task and organize for study the problems, definitions, roles, assignments, and other related points. Phase four is the independent and group study. Phase five, students analyze progress process; and phase five, students analyze progress and process. Phase six, recycle the activity.

#### **3. Social System**

According to Joyce, et al. [33], the social system is democratic, governed by decisions developed from, or at least validated by, the experience of the group-within boundaries and in relation to puzzling phenomena identified by the teacher as object to the study. The atmosphere is one of reasons and negotiation.

#### 4. Principles of Reaction

The teacher in this model according to Joyce, et al. [33] plays a facilitative role directed at group process and requirements of inquiry. The teacher's role is an academic counselor. On the other hand, students react to the puzzling situation and examine the nature of their common and different reactions. They determine what kinds of information they need to approach the problem and proceed to collect relevant data. They generate hypotheses and gather the information needed to test them. They evaluate their products and continue their inquiry or begin a new line of inquiry. Likewise, the teacher needs to guide the students in methods of data collection and analysis, help students frame testable hypothesis, and decide what would constitute a reasonable test of hypothesis.

#### 5. Support System

According to Joyce, et al. [33], the support system for group investigation should be extensive and responsive to the needs of the students. The teacher and students must be able to assemble what they need when they need it. Library and access to outside resources must be provided to students.

#### 6. Application

This model fits with the environment of "open" classroom as well as traditional classrooms [33]. They added that students who have participated in classroom meetings and/or self-directed inquiry-oriented learning will probably have an easier time. On the other hand, students who have not experienced the kind of social interaction, decision making and independent inquiry called for in this model may take some time before they function at a high level.

This teaching model, originally developed by Dewey [71], promotes critical thinking of students in a social process through which students use democratic process for purposes of academic inquiry. Its three basis components are inquiry, knowledge and group dynamics. Thus, through the social process new information is continually created by students resulting in data assessment, hypothesis formation and testing, and considering alternative courses of action to come up with a decision. Also, this model can be used in open or traditional classrooms where the teacher acts as a facilitator or in an academic environment in a democratic classroom.



### **Advance Organizers Model**

Another type of teaching model that promotes critical thinking is Advance Organizers Model formulated by David Ausubel [73]. It is a teaching model that promotes critical thinking [74], and was categorized to belong to the information-processing family [33]. In addition, according to Joyce, et al. [33], this model was designed to provide students with a cognitive structure for comprehending material presented through lectures, readings, and other media. It can be used with any teaching content and with students of every age. Also, this model can be combined with other models such as when presentations are mixed with inductive activity.

#### **Components of Advance Organizers Model**

##### **1. Focus**

According to Joyce, et al. [33], the primary concern of Ausubel in formulating this model is to help teachers organize and convey large amounts of information as meaningfully and efficiently as possible. Ausubel believed that the acquisition of information is a valid and essential goal of schooling, and that theories can guide teachers in transmitting bodies of knowledge to their students. Here, the teacher acts as an organizer of subject matter and presents information through lectures and readings, and providing tasks to the learner to integrate what has been learned. In the inductive approach which is also involved in this model, the student discovers or rediscovers concepts, thereby making them constructors of knowledge according to Ausubel. Thus, the model is designed to strengthen students' cognitive structures [73].

##### **2. Syntax**

Joyce, et al. [33] identified three phases of activity in using the advance organizer model. Phase one is the presentation of the advance organizer which consists of three activities: the clarifying aims of the lesson; presenting organizer: identify defining attributes, give examples, provide context, and repeat; prompting awareness of learner's relevant knowledge and experience. Phase two is the presentation of learning task or material which includes: presentation of material, maintaining attention, making organization explicit, and making logical order of learning material explicit. The last phase is the strengthening of cognitive organization

which consists of four activities namely: using principles of integrative reconciliation, promoting active reception learning, eliciting critical approach to subject matter, and clarification.

The activities involved in this model are designed to increase clarity and stability of the new learning material and a critical approach to knowledge is fostered by asking students to recognize assumptions or inferences that may have been in the learning material, to judge and challenge these assumptions and inferences, and to reconcile contradictions among them.

### 3. Social System

Joyce, et al. [33] emphasized that the teacher in this model retains control of the intellectual structure because it is continually necessary to relate the learning materials to the organizers and to help students differentiate new material from previously learned material. There is however a more interactive learning situation in the last phase with students initiating questions and answers.

### 4. Principles of Reaction

There are two principles of reaction: 1) negotiation of meaning and 2) responsively connecting organizer and material [33]. They added that ideally, students will initiate their own questions in response to their own drives for meaning.

### 5. Support System

Data-rich, well-organized material is the critical support requirement of this model. Thus, the model provides guidelines for building or organizing instructional materials.

### 6. Application

The advance organizer model is especially useful to structure extended curriculum sequences or courses and to instruct students systematically in the key ideas of the field [33]. By following the steps, major concepts and propositions are explained and integrated, so that at the end of instruction, the learners should gain perspective on the entire area being studied. There is also an increase in the learner's grasp of factual information, and it can also be used to teach skills of effective reception learning. As a result, the model will effectively teach critical thinking and cognitive reorganization.



In summary, the advance organizer model is a teaching model to help teachers organize and convey large amounts of information to students. By following the different phases of the model, the students will help to organize, present the learning material, and make a logical connection and reorganization of the subject matter. The teacher maintains control of the learning process to continually relate the learning material to the organizer. Well-organized material is critical in using this teaching model. Finally, this model is effective in systematically teaching students contents and theories, so that they will gain perspectives on the field being studied.

### **Synectics**

The synectics teaching model belongs to the information-processing family of models categorized by Joyce, et al. [33] and was developed by William J.J. Gordon and George Prince [75] as an approach to problem solving in 1960. This model is based on four ideas that challenged conventional views about creativity. The four areas are 1) creativity is important in everyday activities; 2) the creative process is not all mysterious; 3) creative invention is similar in all fields and is categorized by the same intellectual processes; and 4) individual and group invention are very similar.

### **Components of Synectics Teaching Model**

#### **1. Focus**

According to Gordon [75], it is an operational theory for the preconscious psychological mechanisms present in man's creative activity. This model is particularly effective in teaching creative thinking, critical thinking, and writing in all subject areas [36]. The authors added that in synectics, metaphors include all figures of speech that join together different and apparently irrelevant elements through the use of analogy. Three forms are stressed in synectics model: 1) direct analogy, 2) personal analogy, and 3) symbolic analogy.

#### **2. Syntax**

According to Joyce, et al. [33], synectics has two strategies: creating something new and making the strange familiar. The syntax for creating something new are 1) description of the present situation, 2) direct analogy, 3) personal analogy, 4) compressed conflict, 5) direct analogy, and 6) reexamination of the original task. On the other hand, the syntax for making the strange familiar are

1) substantive input, 2) direct analogy, 3) personal analogy, 4) comparing analogies, 5) explaining differences, 6) exploration, and 7) generating analogy.

### 3. Social System

According to Joyce, et al. [33], both models are moderately structured. The teacher initiates the phases and guides the use of operational mechanisms, but the students' responses are quite open. Norms of cooperation, "play of fancy", and intellectual and emotional equality are essential to establishing the setting for creative problem solving. The rewards in this model are internal, which comes from students' satisfaction and pleasure with the learning activity.

### 4. Principles of Reaction

The model encourages openness among students, non-rational, and creative expressions [33]. Also, they added that the model accepts all students' responses and selects analogies that help students stretch their thinking.

### 5. Support System

Unlike the other types of teaching model, Joyce, et al. [33] mentioned that synectics does not need a special support system. A typical classroom can provide the necessities.

### 6. Application

Some possible uses of the synectics models are creative writing, exploring social problems, problem solving, creating a design or product, and broadening the perspectives of students of a concept [33]. The most effective use of synectics develops over time. It has short-term results in stretching views of concept and problems, but when students are exposed repeatedly to the process, they can learn it with increasing skill.

From the above discussion, it can be gleaned that synectics is focused on developing critical thinking skills of students along with other skills. Three forms are stressed in synectics model: 1) direct analogy, 2) personal analogy, and 3) symbolic analogy. Two sets of syntax are employed in two strategies: creating something new and making the strange familiar. The social system is moderately structured where openness and creative expressions are encouraged among students. There is no special support system needed and is applicable in creative writing,



exploring social problems, problem solving, creating a design or product, and broadening the perspectives of students of a concept.

The selected teaching models that promote critical thinking skills of students and resembled the features of the Blended Socratic Method of Teaching (BSMT) model are the Jurisprudential Inquiry Model (JIM) and the Inductive-Thinking Model.

The Jurisprudential Inquiry Model (JIM) focuses on developing competence of students through the use of confrontation or Socratic mode of discussion. The components of the model such as, syntax; principles of reaction which are maintained in a dialectic style and promote respect to students; the social system where instructor initiates the discussion with openness and intellectual climate; and problem situations that are given to students based on a problem situation reflected and integrated the fundamental elements of the RED model of critical thinking. The skills integrated were recognizing assumptions, evaluating arguments, and drawing conclusions.

Similarly, the Inductive-Thinking Model reflected all the key elements of the RED model of critical thinking. Identifying and enumerating the data that are relevant to the problem and interpreting the data (syntax), processing information by eliciting questions (principles of reaction), a moderately structured classroom environment (social system), and analyzing raw data which could be based on a problem situation (support system) are integral components of the RED critical thinking skills. Furthermore, the model is primarily applicable in developing the thinking capacity of students.

### **3. Socratic Method of Teaching**

In this section, the Socratic method of teaching will be discussed as follows: what it is about, how the model is used in teaching, and its effectiveness in developing critical thinking skills of students.

The Socratic method is a philosophic method [47] referred to as the method of dialectics [76] developed by Socrates, one of the three famous Greek philosophers. The Encyclopedia Britannica, 2014, is an approach by which one seeks the truth via a process of questions and answers [77]. Chafee [47] defined the Socratic

method as an investigation of complex issues through a question and answer format. This method uses a dynamic approach of questioning and intellectual analysis to draw answers out of people rather than lecturing them. The questioning strategy is the foundation of the Socratic approach [16]. The oldest and still the most powerful, teaching tactic for fostering critical thinking is Socratic teaching [78]. Additionally, the two mentioned authorities emphasized that in Socratic teaching focus is on giving students questions, not answers. It provides a model of an inquiring, probing mind by continually probing into the subject with questions [78].

Teaching doesn't mean only lecturing or talking alone in class. Like what Plato said, there should be a dynamic exchange of ideas which he referred to as dialectic. Dialectic comes from the Greek word "to argue" or "converse," a dynamic exchange or method involving contradiction or a technique for establishing an informed conclusion [49]. Through the dialectic method, the goal is to enable the interlocutor (student) to respond to questions at the highest level of understanding and is considered the "cornerstone" of the educational system.

A Socratic approach to teaching is based on the practice of disciplined, rigorously thoughtful dialogue where the instructor professes ignorance of the topic under discussion in order to elicit engaged dialogue with students [79]. They added that this method is an approach that is designed to engage students in critical thinking. The Socratic approach is used to get one to re-examine what they believe; it is not an approach used to present absolute information [77].

Socrates left no writings of his own, the source of his ideas comes from his student and disciple, Plato who wrote Dialogues portraying Socrates' ideas [49]. Despite that fact, many benefited from his ideas through his student.

Therefore, the abilities we gain by focusing on the elements of reasoning in a disciplined and self-assessing way and the logical relationships that result from such disciplined thought prepare us for Socratic questioning [78].

Furthermore, in a speech delivered by Political Science Professor Rob Reich [17], recipient of the Award for Teaching Excellence, he described what the Socratic method is and how it is used in the classroom. According to him, the Socratic method is not teaching per se. It is one where the Socratic teacher acts as "the guide on



the side.” The classroom experience is a shared dialogue between teacher and students. The teacher or the leader of the dialogue as well as students asks probing questions in an effort to expose the values and beliefs which frame and support the thoughts and statements of the participants. Likewise, there is no pre-determined argument or terminus to which the teacher attempts to lead the students. Lastly, those who practice the Socratic method do not use PowerPoint slides.

In addition, according to Reich [17], the essential components of the Socratic Method are as follows: 1) it uses questions to examine values, principles, and beliefs of students; 2) it focuses on moral education, on how one ought to live; 3) it demands a classroom environment characterized by “productive discomfort”; and 4) it is better used to demonstrate complexity, difficulty, and an uncertainty than at eliciting facts about the world. Reich’s model of Socratic method is not based entirely on Socrates’s methods in Plato’s dialogues. His model eliminated confrontational humiliation that has mistakenly been associated with the Socratic approach. Instead, his model is a dynamic format for helping students takes genuine intellectual risks in the classroom and learns about critical thinking.

### **3.1 The Socratic Method of Teaching**

There are several reasons why the Socratic method of teaching was chosen in this study. These are as follows:

3.1.1 The Socratic method is the oldest and still the most powerful teaching tactic for fostering critical thinking [78].

The authors likewise added that this method foster critical thinking as the focus is on giving students questions, not answers. Also, the method models an inquiring, probing mind by continually probing into the subject with questions. Similarly, the method is considered a tactic and approach because Socratic questioning is a highly disciplined process of learning. In modelling the practice of Socrates, the Socratic questioner or a teacher acts as a ‘guide on the side’ of the inner critical voice which the mind develops when it develops critical thinking abilities. Through the use of this method, Paul and Elder [78] emphasized that the contributions from the members of the class are similar to many thoughts in the mind, and all of the thoughts presented must be dealt with carefully and fairly. By following up all answers

with further questions and by selecting questions which advance the discussion, the Socratic questioner forces the class to think in a disciplined, intellectually responsible manner, while yet continually aiding the students by posing facilitating questions.

Through the discussion provided by Paul and Elder [78], there is no doubt that the Socratic method of teaching is still the most powerful teaching tactic for fostering critical thinking. By continually probing into the subject with questions, students are taught to think in a highly disciplined process thereby fostering their critical thinking. An important ingredient as well of the method is considering the contributions of the class as many thoughts in the mind which must be treated fairly and carefully. It shows giving respect to every students' ideas and opinions.

3.1.2 It is considered the "coping-stone" of the educational system (Plato, 375 BC/2003 cited in Whiteley, 2006) and the "finishing touch" for the process of learning [16].

Coping stone is defined by Oxford dictionary [80] as a finishing touch or crowning achievement. In this sense, Plato, a Greek philosopher and student of Socrates [81]) considered the Socratic method of teaching as the coping stone of the educational system. Whiteley [16] on the other hand, interpreted what Plato stated as a 'coping stone' as the "finishing touch" for the process of learning [16]. Through the dialectic style, the approach taken by the teacher is a 'feigned ignorance'" [79] with respect to the subject area as the teacher continually provides questions and not the answers. The authors likewise added that the method is designed to engage the student in critical thinking and in the process of reflective thinking.

3.1.3 It is time to reclaim the Socratic method as a relevant framework for actively engaging students with the critical thinking process [17].

Rob Reich [17], a Political Science Professor at Stanford University and a recipient of the 2001 Walter J. Gores Award for Teaching Excellence, stated that it is time to redeem the Socratic method of teaching in class. In his speech, Professor Reich defines what the Socratic method is, identifies its specific components, and gives tips for how to use it in the classroom. He also emphasized that the Socratic method of teaching as an excellent way of fostering students' critical thinking. He added that the Socratic teacher is a 'guide on the side' rather than a 'sage



on the stage.' In the dialogue, the teacher or any students can ask questions. As the interaction progresses, the Socratic teacher is considered as much a participant as a guide of the discussion. Finally, he identified four essential components of the Socratic method as follows: 1) the Socratic method uses questions to examine the values, principles, and beliefs of students; 2) the Socratic method focuses on moral education, on how one ought to live; 3) the Socratic method demands a classroom environment characterized by "productive discomfort"; and 4) the Socratic method is better used to demonstrate complexity, difficulty, and uncertainty than at eliciting facts about the world.

Reich clearly emphasized the significance of reclaiming the Socratic method of teaching as it is an integral part of fostering critical thinking of students.

### **3.2 How to Use Socratic Method of Teaching**

Merrits and Walter [79] offered some tips for teachers in implementing the Socratic method of teaching in the classroom: 1) plan significant questions that provide structure and direction to the lesson; 2) make sure the questions are phrased clearly and specifically; 3) allow at least 5 to 10 seconds for students and remain quiet during that time; 4) keep the discussion focused; 5) follow up on the students' responses and invite elaboration; 6) stimulate the discussion with probing questions; 7) periodically summarize what has been discussed; 8) draw as many students as possible into the discussion; 9) do not pose yes/no questions; and 10) do not pose questions that are vague, ambiguous, or beyond the level of the students. Socratic questioning provides a vehicle for advisors to engage students in a reflective dialogue that probes student perceptions and uncovers factors that may help or inhibit student success [78].

The two mentioned authors added that during the discussion or Socratic questioning, the teacher is a model of critical thinking: respects students' understanding, shows genuine interest in students' thinking, poses meaningful questions, and sustains a stimulating classroom environment and intellectually open, safe and demanding learning environment where students are challenged, yet comfortable in answering questions honestly and fully in front of their peers.

It can be inferred from above, the role of a teacher/instructor in using Socratic method in the classroom is crucial. Likewise, the above presupposes a synchronous traditional classroom setting. However, according to Whiteley [16], most of the above guidelines would apply to a synchronous traditional classroom setting and asynchronous virtual classroom setting which he referred to as TCS and VCS, respectively.

Paul and Elder [78] called the teacher/instructor the Socratic questioner, who should act as the logical equivalent of the inner critical voice which the mind develops when it develops critical thinking abilities. As a Socratic questioner, similar to what Merriots and Walter (2006) mentioned on the guidelines for teachers in using Socratic questioning, the following guidelines must be observed: 1) keep the discussion focused; 2) keep the discussion intellectually responsible; 3) stimulate the discussion with probing questions; 4) periodically summarize what has and what has not been dealt with and/or resolved; and 5) draw as many students as possible into the discussion.

Paul and Elder [82] are great proponents of Socratic questioning in fostering critical thinking among students. In a book entitled the Thinker's Guide to the Art of Socratic Questioning, they reiterated the role of the leader in Socratic discussion which could be a teacher or a student who must follow some guidelines in order to foster disciplined questioning on the part of the students: 1) keep participants focused on the elements of thought; 2) keep participants focused on systems of thought; and 3) keep participants focused on standards of thought.

Accordingly, Paul and Elder [82] in the thinker's guide they clearly explained the guidelines by providing a checklist.

First, how will the Socratic teacher determine if the participants of the discussion are focused on the **elements** of thought?

1. Did the questioner make the goal of the discussion clear?
2. Did the questioner pursue relevant information?
3. Did the questioner question inferences, interpretations, and conclusions where appropriate or significant?
4. Did the questioner focus on key ideas or concepts?



5. Did the questioner note questionable assumptions?
6. Did the questioner question implications and consequences?
7. Did the questioner call attention to the point of view inherent in various answers?
8. Did the questioner keep the central question in focus?
9. Did the questioner call for a clarification of context, when necessary?

Second, how can the Socratic teacher determine if the participants are focused on **systems** for thought?

1. Did the questioner distinguish subjective questions from factual questions, from those requiring reasoned judgment within conflicting viewpoints?
2. Did the questioner keep the participants aware of alternative ways to think about the problem?

Lastly, how can the Socratic teacher determine if participants are focused on **standards** for thought?

1. Did the questioner call for clarification when necessary?
2. Did the questioner call for more details or greater precision when necessary?
3. Did the questioner keep participants sensitive to the need to check facts and verify the accuracy of information?
4. Did the questioner keep participants aware of the need to stick to the question on the floor to make sure their “answers” were relevant to the question being addressed at any given point?
5. Did the questioner keep participants aware of the complexities in the question on the floor? Did the questioner ask participants to think deeply about deep issues?

### **3.3 Effectiveness in Developing Critical Thinking Skills of Students**

According to Paul and Elder [78], the Socratic method of teaching should be used in any discipline due to the following elements: 1) shared goals and objectives (which defined the subject focus), 2) shared questions and problems (whose solution they pursued), 3) shared information and data (which they used as an

empirical basis), 4) shared modes of interpreting or judging that information, 5) shared specialized concepts and ideas (which they used to help them organize their data), and 6) shared key assumptions (that gave them a basis from which to collectively begin).

In addition, the Socratic method is possible in a class as large as 70 [17]. Hence, a teacher should not be afraid of large classes.

In this section, the Socratic method of teaching's origin and its descriptions were discussed, why the Socratic method of teaching is an effective tool in teaching, how to use the method according to Socrates and other researchers and educators, and its effectiveness in developing critical thinking skills of students. This review showed that the method is still the best method of enhancing critical thinking skills as proven by many authors and critics.

Critical thinking and its underlying elements were exhaustively discussed in this section. Critical thinking has various definitions. However, it could be summed up as not just only thinking, but it is a special kind of thinking and a skill. It is a form of cognition which is characterized as disciplined, self-directed, reflective, analytical, dialectical, synthesizing, apprehensive of the limits of one's own thinking, and meta-thinking. And it seeks to be an ultimate tool in problem solving and decision making in a certain context or situation.

Critical thinking models such as Paul-Elder's critical thinking framework and the RED model were discussed and their advantages and disadvantages discussed, and reasons were given why the RED model was used in this study. It is evident from the review that the core elements of the RED model are all present in the BSMT model.



**Table 1 Synthesis of How the Socratic Method of Teaching Promotes Critical Thinking Skills**

Critical Thinking Skills (based on RED Model of Critical Thinking)	Fundamental Elements	Socratic Method of Teaching
Recognize Assumptions	1) Focus	<ul style="list-style-type: none"> <li>- focuses on seeking truth and intellectual analysis via a process of question and answer and primarily designed to engaged students in critical thinking</li> <li>- questioning strategy and dialectic style are the heart of this method</li> </ul>
	2) Syntax	<ul style="list-style-type: none"> <li>- the Socratic teacher asks probing questions</li> <li>- the interlocutor (student) responds at the highest level of understanding</li> <li>- dynamic exchange between Socratic teacher and interlocutor to establish informed conclusion</li> </ul>
Evaluate Arguments	3) Principles of Reaction	<ul style="list-style-type: none"> <li>- classroom environment characterized by “productive discomfort” (Reich, 2003)</li> <li>- Originally, the method involved confrontational humiliation (Plato, 375 BC)</li> </ul>
	4) The Social System	<ul style="list-style-type: none"> <li>- the Socratic teacher acts as a ‘guide on the side’ to keep the discussion focused where there is shared dialogue in the classroom</li> </ul>
Draw Conclusions	5) Support System	<ul style="list-style-type: none"> <li>- raw data based on any topics</li> </ul>
	6) Application	<ul style="list-style-type: none"> <li>- applies in a synchronous traditional classroom setting (Whiteley, 2006)</li> <li>- older students (Joyce, et al., 2009)</li> <li>- can be used in any discipline (Paul and Elder, 1997)</li> </ul>

Table 1 shows how the Socratic method of teaching developed by Socrates and the model reflect the promotion of critical thinking skills.

The method seeks to analyze intellectually the values, principles, and beliefs of students through question and answer and is primarily designed to engage students in critical thinking. Proponents of critical thinking added that the questioning strategy and dialectic style are the heart of this method [49]; Magee [77]; Paul and Elder [78]; Reich [17]; Whiteley [16]). As emphasized by Paul and Elder [78]), the Socratic method is the oldest and still the most powerful teaching tactic for fostering critical thinking.

As regards the process, the Socratic teacher asks probing questions and the interlocutor or student responds using the highest level of understanding. The Socratic teacher should be aware that the questions must not be answerable by yes/no and should focus on the topic of discussion. Clearly, through this process, students integrated in the learning process the essential key elements of promoting critical thinking skills as it is also the primary aim of this model.

The principles of reaction which is based on “productive discomfort” and in some cases “confrontational humiliation” aimed at maintaining a dynamic exchange in the classroom. In this way, students are mentally alert and will be motivated and encouraged to keep track of the discussion, thereby helping as well in developing students’ critical thinking.

Furthermore, the Socratic teacher will keep the role of a guide in class and be focused on keeping track of the shared dialogue in the classroom. The topic could be in any discipline which seeks to find the underlying truth.

These is a unanimous consensus since antiquity, during Plato’s time, that the Socratic method of teaching is the most powerful tool of engaging students and promoting critical thinking, hence it is one of the bases of developing the instructional model in this study.



## 4. Blended Learning

### 4.1 Blended (Hybrid) Learning Defined

The succeeding discussions are the definition adopted for blended learning. Clayton Christensen Institute [83] defined blended learning or Hybrid Learning [84] as a formal education program in which a student learns:

1. At least in part through online learning, with some element of student control over time, place, path, and/or pace;
2. At least in part in a supervised brick-and-mortar location away from home; and
3. The modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience.

The core of blended learning is incorporating the internet in the teaching and learning process combining physical and virtual classrooms and the blend depends on the teacher [23].

Similarly, blended learning was defined as a combination of classroom learning with online learning, in which students can, in part, control the time, pace, and place of their learning [85].

In another similar view, Pankin, Roberts, and Savio [86] defined blended learning as structured opportunities to learn, which use more than one learning or training method, inside or outside the classroom. This definition includes different learning or instructional methods (lecture, discussion, guided practice, reading, games, case study, simulation), different delivery methods (live classroom or computed mediated), different scheduling (synchronous or asynchronous) and different levels of guidance (individual, instructor or expert led, or group/social learning).

In a similar vein, a blended learning approach to instruction was described by Rothrauff [87] and Educause [84] as a combination of face-to-face classroom methods with computer-based/mediated activities, resulting in an integrated learning experience for students.

The term blended learning is generally applied to the practice of using both online and in-person learning experiences when teaching students [88]. Also called hybrid learning and mixed-mode learning, blended-learning experiences may vary widely in design and execution from school to school.

The traditional method of teaching as well as online teaching has been subject to criticism, but according to Whiteley [16] the online or virtual classroom setting (VCS) has more positive features to engage students in critical thinking. If blended learning is used, students are more at ease during any dialogue [16]. It was also emphasized that the opportunity to foster greater learning in a VCS environment using the Socratic method should not be overlooked [16].

From the definitions above, there is a consensus that blended or also referred to as hybrid learning is a teaching and learning process where there is a combination of face-to-face or traditional classroom setting and online instruction or virtual classroom setting. The combination of instruction involves different instructional methods. The virtual or online instruction could be executed in multiple settings either in or out of the classroom.

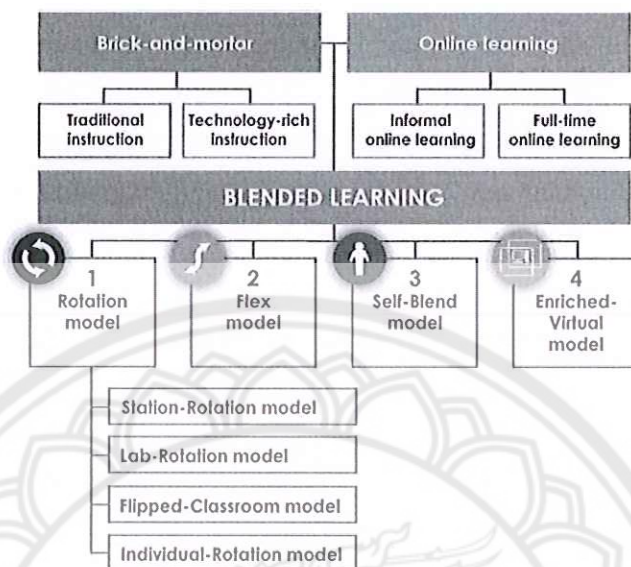
#### **4.2 Reasons to Blend**

It was cited that blended learning is the mixing of traditional face-to-face teaching and online education, and many people feel it may be the next big thing in education. Here are six reasons why according to Morten Fahlvik [23].

1. Teaching 21st century skills
2. Engaging modern students
3. More effective use of classroom time
4. More engaged parents
5. Better results
6. Lower costs



### 4.3 Types of Blended Learning



**Figure 8 Types of Blended Learning**

According to Christensen Institute [83], blended learning is divided into different types as follows:

**1. Rotation model**-in this model, students rotate between learning modalities, at least one of which is online learning. Other modalities might include activities such as small-group or full-class instruction, group projects, individual tutoring, and pencil-and-paper assignments.

The sub-types of the Rotation model are as follows:

**1.1 Station Rotation** (also referred to as Classroom Rotation or In-Class Rotation)-students rotate on a fixed schedule or at the teacher's discretion among classroom-based learning modalities. The rotation includes at least one station for online learning. Other stations might include activities such as small-group or full-class instruction, group projects, individual tutoring, and pencil-and-paper assignments. Some implementations involve the entire class alternating among activities together, whereas others divide the class into small-groups or one-by-one rotations. The Station Rotation model differs from the Individual Rotation model

because students rotate through all of the stations, not only those on their custom schedules.

1.2 Lab Rotation-students rotate on a fixed schedule or at the teacher's discretion among locations on the brick-and-mortar campus. At least one is a learning lab for predominantly online learning, and the other(s) are classroom(s) for other learning modalities. As the name implies the Lab Rotation model differs from the Station Rotation model because students rotate among locations on the campus instead of staying in one classroom for the blended course or subject.

1.3 Flipped Classroom-students rotate on a fixed schedule between face-to-face teacher-guided practice (or projects) on campus during the standard school day and online delivery of content and instruction of the same subject from a remote location (often home) after school. The primary delivery of content and instruction is online, which differentiates a Flipped Classroom from students who are merely doing homework practice online at night. The Flipped Classroom model accords with the idea that blended learning includes some element of student control over time, place, path, and/or pace because the model allows students to choose the location where they receive content and instruction online.

1.4 Individual Rotation-students rotate on an individually customized, fixed schedule among learning modalities, at least one of which is online learning. A teacher sets individual student schedules. It is different from Rotation models because students do not necessarily rotate to each available station or modality.

**2. Flex model** - a program in which the online learning is the backbone of student learning, even if it directs students to offline activities at times. Students move on an individually customized, fluid schedule among learning modalities, and the teacher of record is on-site. The teacher-of-record or other adults provide face-to-face support on a flexible and adaptive as-needed basis through activities, such as small-group instruction, group projects, and individual tutoring. Some implementations have substantial face-to-face support and others have minimal (e.g., some Flex models may have face-to-face certified teachers who supplement the online learning on a daily basis, whereas others may provide little face-to-face



enrichment; others may have different staffing combinations; these are useful modifiers to describe a particular Flex model).

**3. A La Carte model** (formerly Self-Blend model) - students take one or more courses entirely online with an online teacher of record and at the same time continue to have brick-and-mortar educational experiences. Students may take the online courses either on the brick-and-mortar campus or off-site. It is not a whole-school experience compared to full-time online learning and the Enriched Virtual model.

**4. Enriched Virtual model** - this type is divided between attending a brick-and-mortar campus and learning remotely using online delivery of content and instruction. Many Enriched Virtual programs began as full-time online schools and then developed blended programs to provide students with brick-and-mortar school experiences. It is different from the Flipped Classroom because in Enriched Virtual programs, students seldom attend the brick-and-mortar campus every weekday. It differs from the A La Carte model because it is a whole-school experience, not a course-by-course model.

According to Kim and Thomson [89], there are four models of blended learning. The first three are similar to the Christensen Institute namely: 1) Lab Rotation, 2) Class Rotation, and 3) Flex Model. According to them, there is a fourth type which is a newer model known as Pod Model. This model is like a school within a school where it has multiple levels and the teacher acts as an advisor, behavior specialists, and an instruction.

According to Bhashkar [90], there are six forms of blended learning namely: 1) Face-to-face Driver, 2) Rotation, 3) Flex; 4) Online Lab, 5) Self-Blend, and 6) Online Driver. The description of each form is similar to the description given by the Christensen Institute. In this study, the Face-to-face Driver is the method to be employed. It is defined as a blended learning model in which teachers deliver most of the curriculum [90] and Clayton Christensen Institute [83]. It is added that teachers led the class in a lecture following an established protocol taking precedence and technology being a secondary thought. However, they also produce online resources to

supplement or revise course material which students can study at home, in the classroom or in a technology lab.

Another form of Blended Learning which is called Blended Distributed Learning (BDL) [91] is one which is used for developing critical thinking skills of army leaders. In this study, BDL was defined as a model which requires instructor-student and student-student interaction that is completely distributed, thus the name blended distributed learning.

This study focuses on enhancing students' critical thinking; it is in line with Kim and Thomson [89] who explained that blended learning provides students with skills and practice while the teacher focuses on depth and application of concepts to teach higher order thinking skills which includes critical thinking.

The definition of blended learning by Christensen Institute, formerly the Innosight Institute was adapted in this study [92]. In this study, it was added that blended learning does not only provide devices for students for them to study, but there is an intentional shift to online instructional delivery for a portion of the day in order to boost learning and operational productivity. Likewise, online learning is described in this guide as a structured, teacher-led education that takes place over the Internet using a web-based educational system. It was added that classes may be conducted synchronously (communication in which participants interact in real time, such as online video) or asynchronously (communication separated by real time, such as email or online discussion forum) and classes may be accessed in multiple settings (school buildings or out of school building).

Moreover, one of the most important parts of this guide is providing why blended learning should be adopted in classrooms. The reasons are: it improves ability to personalize learning; it provides potential for individual progress; it improves student engagement and motivation; and it facilitates extending time and stretch resources. It has the potential to extend the reach of effective teachers, ability to improve working conditions, decrease device costs, student and parent adoption of learning application, and interest in narrowing the digital divide. In support of the findings of Bailey, et al. [92], Thomson provided the results of using blended learning in the classroom in two perspectives: student and teachers. As regards students



perfectives, findings showed that students are more engaged compared to traditional classroom setting; students can control their time in studying; and it is applicable even in larger classes. On the other hand, in the teachers' perfectives, teachers find it easier to plan for small group; teaching is more rewarding; and classroom management is easy.

#### **4.4 Examples of Effective Blended Learning**

**Xerox Corporation.** In this study, a 6 month program was designed to teach leadership skills to executives and managers around the globe where students meet synchronously (2 times a month) and asynchronously (via bulletin board space). Findings indicated training success as documented by learner satisfaction surveys administered right after the course and "impact surveys" given to both learners and their managers about a month and a half after the course. In addition, the company determined in an internal study that the training had a positive return on investment [93]. As such in 2012, Xerox won a "Learning Leader" award from Bersin and Associates, a research and advisory services firm specializing in enterprise learning and other areas of human resources and talent management.

**Entrepreneurial Skills.** This study involved teaching entrepreneurship education to students and teachers at 3 universities in eastern Canada. Blended learning was used wherein online activities included an asynchronous online game, 3 hours of synchronous sessions consisting of lectures, case study discussions, guest speakers, small group speakers, and small group meetings; and workshops. The results showed that students generally had positive evaluations of many aspects of the course. In addition, students were enthusiastic and prefer virtual learning than traditional classroom instruction [94].

#### **4.5 Benefits of Blended Learning**

According to the University of Cambridge [95], a strong advantage of blended learning, particularly with large groups, is that it offers a time-effective and personalized way of learning and practicing material. Blended learning aims to place the individual learner at the center of the teaching and learning experience. Learners are empowered and need to be guided in how to take responsibility for their own learning. Teachers can use the face-to-face lessons to address and provide guidance on

specific issues and questions that the individual learner may have. Likewise, it was added that blended learning should offer the opportunity for learners to access more of their course content independently and to work more autonomously.

In this section, blended (hybrid) learning which is now gaining popularity in many educational institutions worldwide was discussed in detail. The different types of the blended learning includes rotation model, flex model, a la carte model, and enriched [83]. Another author, Bhashkar [90], identified six forms of blended learning namely: 1) Face-to-face Driver, 2) Rotation, 3) Flex, 4) Online Lab, 5) Self-Blend; and 6) Online Driver. The description of each form is similar to the description given by the Christensen Institute. The Face-to-face Driver is the method to be employed in this study. It is defined as a blended learning model in which teachers deliver most of the curriculum [90] and Christensen Institute [83]). It is added that teachers lead the class in a lecture following an established protocol taking precedence and technology being a secondary thought. However, they also produce online resources to supplement or revise course material which students can study at home, in the classroom or in a technology lab.

It was also found in the literature review that blended learning should be used in class because it is an effective tool in teaching 21<sup>st</sup> century skills, engaging to modern students, providing more effective classroom time with better results and lower costs. Therefore, from this literature review it was found that blended learning provides students with skills and practice while the teacher focuses on depth and application of concepts to teach higher order thinking skills that includes critical thinking.



**Table 2 Synthesis of How Blended Learning Promotes Critical Thinking Skills**

<b>Critical Thinking Skills</b> (based on RED Model of Critical Thinking)	<b>Fundamental Components</b>	<b>Blended Learning</b> (Face-to-face Driver, Bhaskar, 2013)
	1) Focus	- a combination of face-to-face and computer- based instruction (Rothrauff, 2011)
<b>Recognize Assumptions</b> - inference - ability to separate fact from opinion/ fiction		- the core is incorporating internet in the teaching and learning process (Fahlvik, 2013) - online and in-person learning experiences
<b>Evaluate Arguments</b> - ability to analyze information objectively and accurately - ability to question the evidence - ability to understand how emotion influences behavior	2) Syntax	- the process involved supplemental use of online discussion as directed by the teacher.
	3) Principles of Reaction	- easy working environment for students
	4) The Social System	- structured, teacher-led education which is conducted synchronously or asynchronously
<b>Draw Conclusions</b> - ability to decide the course of action	5) Support System	- Accessible internet connection for students - information communication technology such as computers
	6) Application	- Applicable to young and adult learners

There are many studies supporting that Blended Learning promotes critical thinking of learners [94]; Whiteley [16]; Bersin, et al. [93]; and Straus, et al. [91]. Table 2 shows how blended learning promotes critical thinking of students.

Online or virtual classroom setting (VCS) [16] has more positive features to engage students in critical thinking. Students are more at ease at dialogue, time-effective and personalized way of learning and practicing material. Here, the learners are empowered and are taking responsibility of their learning experience.

Students under blended instruction particularly using the Face-to-face Driver method are using online learning as supplemental to face-to-face instruction. The curriculum is delivered under the close supervision of the teacher, conducted synchronously or asynchronously.

The different processes involved in blended learning provide students with skills and practice while teacher focuses on depth of concepts to teach higher order thinking including critical thinking.

#### **5. The Blended Socratic Method of Teaching (BSMT) Model**

In order to enhance the critical thinking skills of undergraduate business students, the Blended Socratic Method of Teaching (BSMT) model (Table 3) shall be described according to its focus, syntax, principles of reaction, the social system, support system, and application of the instructional model.

After presenting the proposed model, the syntax (Table 4) of the instructional model will be discussed and correlated to the fundamental key elements of the RED Model of critical thinking skills.

The last table (Table 5) will be the syntax justification of the proposed Blended Socratic Method of Teaching (BSMT) model.



Table 3 The Blended Socratic Method of Teaching (BSMT) Model and Critical Thinking Skills

Critical Thinking Skills (based on RED Model of Critical Thinking)	Fundamental Components	The Blended Socratic Method of Teaching (BSMT) Model
<ul style="list-style-type: none"> <li>- Recognizing assumptions, evaluating arguments, and drawing conclusions are the essential elements of the RED model of CT which are embodied at the core of the BSMT model</li> </ul>	1) Focus	<ul style="list-style-type: none"> <li>- Enhance critical thinking skills of students through the use of the Socratic method of teaching using face-to-face and online discussion based on real case studies presented by a group of students in class</li> </ul>
<p>In every stage, the key elements of the RED model are integrated as students enhance the ability</p> <ul style="list-style-type: none"> <li>- to separate fact from opinion / fiction</li> <li>- to question the evidence</li> <li>- to understand how emotion influences behavior</li> <li>- to decide the course of action</li> </ul>	2) Syntax	<ul style="list-style-type: none"> <li>- It involves 5 stages: Step 1 - group assignment, analysis, and writing of a business case analysis; Step 2 - class presentation of business case analysis; Step 3 - Socratic questioning or discussion in class; Step 4 - posting the case study on the class Facebook account; and Step 5 - online Socratic discussion using Facebook</li> </ul> <p>(Refer to Table 4 for detailed discussion of each stage as it relates to the RED model of Critical Thinking)</p>
<ul style="list-style-type: none"> <li>- The RED model is intertwined in using the Socratic method of teaching as it is considered the most powerful teaching tactic for fostering CT (Paul and Elder, 1997)</li> <li>- The RED model supports online learning as it enhances CT skills through active learning, constructivist approach to teaching and promotion of the reflective skill (Bennet and Marsh, 2007; Salmon, 2000).</li> </ul>	3) Principles of Reaction	<ul style="list-style-type: none"> <li>- There is an intellectual and confrontational climate: probe students thinking through questions, respect to all views is established while maintain the dialectic style and show urgency by asking question and/or answer as there is a class card monitoring the participation of every member.</li> </ul>

**Table 3 (cont.)**

Critical Thinking Skills (based on RED Model of Critical Thinking)	Fundamental Components	The Blended Socratic Method of Teaching (BSMT) Model
<ul style="list-style-type: none"> <li>- The key elements of the RED model are promoted by the collaborative structure between instructor and students, including the instructional activities in class.</li> </ul>	4) The Social	<ul style="list-style-type: none"> <li>- Collaborative structure between instructor and students where the instructor is considered a 'guide on the side' continuously giving feedback</li> <li>- Activities involve group case analysis, case presentation in class, Socratic discussion in class, and Socratic discussion in Facebook</li> </ul>
<ul style="list-style-type: none"> <li>- The RED model is easily integrated in case studies based on real situations which are within the context of business students</li> <li>- Recognizing assumptions, evaluating arguments, and drawing conclusions are the core elements in analyzing case studies</li> </ul>	5) Support	<ul style="list-style-type: none"> <li>- Teaching materials include cases which are based on real business situations intended to acquaint students with existing issues in business in a Socratic questioning environment.</li> <li>- There are a total of 10 cases</li> <li>- Facebook account for the class</li> </ul>
<ul style="list-style-type: none"> <li>- RED model is integrated in the preparation of the course content and enhances students skills to deal with issues in business field</li> </ul>	6) Application	<ul style="list-style-type: none"> <li>- It is intended for older students and serves as a framework for developing course content in business (case study) and developing a process to enhance critical thinking skills of students through the use of face-to-face and online discussion which later could be done synchronously or asynchronously anytime, anywhere.</li> </ul>



Table 3 identified the essential components of the proposed model and the integration of critical thinking in each element. The Blended Socratic Method of Teaching (BSMT) model presented a blueprint on how to enhance the critical thinking skills of students. Clearly, the main focus of the model is the enhancement of the critical thinking skills of undergraduate business students. In order to achieve the goal, the syntax provides sequential steps in order to accomplish the goal. Also, to better promote critical thinking in class, an intellectual climate and collaborative structure are established in class and in online discussion. The teaching provides more experience to students by providing case studies based on real situations to produce desired behavior. Lastly, the BSMT model prepares students to possess critical thinking skills which will be beneficial to their field in the future - business.

**Table 4 The RED Model of Critical Thinking and the Blended Socratic Method of Teaching (BSMT) Model**

<b>Key Elements of the RED Model of Critical Thinking</b>	<b>Teaching Stages of the BSMT Model</b>	<b>Blended Socratic Method of Teaching (BSMT) Explanation</b>
<b>Recognize Assumptions</b> - ability to separate fact from opinion / fiction	<b>Step 1:</b> Group assignment, analyzing and writing of a business case study	- This stage integrates all the key elements of the RED model as it involves: 1) defining business case problems, 2) gathering pertinent information, 3) analysis of the problems, 4) drawing inference from the given facts, 6) recognizing assumptions; 7) evaluating arguments, 8) establishing alternative courses of action, 9) making decision, and 10) drawing conclusion
<b>Evaluate Arguments</b> - ability to analyze information objectively and accurately	<b>Step 2:</b> Class presentation of business case analysis	- The group shall prepare slides of the case analysis. The group will present the case for 10-15 minutes. The elements of the RED model are integrated in this step as follows: 1) the first part of the presentation is the facts of the case; nature of the case, character, events/incidents, and other important facts; 2) discuss issues and problems. 3) present alternative course of action; 4) answer the problems; and 5) state conclusion.

Table 4 (cont.)

Key Elements of the RED Model of Critical Thinking	Teaching Stages of the BSMT Model	Blended Socratic Method of Teaching (BSMT) Explanation
<ul style="list-style-type: none"> <li>- ability to question the evidence</li> <li>- ability to understand how emotion influences behavior</li> </ul>	<p><b>Step 3: Socratic questioning or discussion in class</b></p>	<p>The RED model can be seen from the following: 1) The instructor/student asks probing questions. 2) The presenter/student/instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions. 3) The members of the class evaluate the questions and provide more arguments and probing questions. 4) The instructor concludes the discussion.</p>
<p><b>Draw Conclusions</b></p> <ul style="list-style-type: none"> <li>- ability to decide the course of action</li> </ul>	<p><b>Step 4: Posting the case study on class Facebook account</b></p>	<p>- Online learning enhances critical thinking skills through supporting the development of an active learning and constructivist approach to teaching and the promotion of reflective skills (Bennett and Marsh, 2007; Salmon, 2000)</p>
	<p><b>Step 5: Online Socratic discussion (through Facebook)</b></p>	<p>The RED model can be seen from the following: 1) The instructor/student post probing questions. 2) The presenter /student / instructor post more probing questions. There is no limit to the questions. No answer will be given except for some factual questions. 3) The members of the class evaluate the questions and provide more arguments and probing questions. 4) The instructor concludes the discussion.</p>
	<p><b>Instructor's Feedback</b></p>	<p>Instructor continuously monitors all the stages providing feedback in every step.</p>



Table 4 presents the Blended Socratic Method of Teaching (BSMT) model which was shaped in the key elements of the RED model of critical thinking skills. Every stage of the model seeks to enhance critical thinking skills of undergraduate business students.

In Step 1, group assignment, analyzing and writing of a business case study, students are engaged in enhancing their CT skills. The step involves 1) define business case problems; 2) gather pertinent information; 3) analyze the problems involved; 4) write business case analysis; 5) draw inference from given facts; 6) recognize assumptions; 7) evaluate arguments; 8) come-up with alternative courses of action; 9) make a decision; and 10) draw conclusions. In it, students will recognize assumptions, evaluate arguments, and draw conclusions.

In Step 2, the case assigned to a group will be presented and in the process integrate the RED model of CT skills. Presentation will begin with presenting the facts of the case which includes the objectives, problems/issues, characters, incidents/events, other pertinent information, alternation courses of action, and conclusion and or recommendation.

Step 3, the presenter, the members of the class, and the instructor all participate equally in the discussion in class. The case will be presented methodically and Socratic discussion will begin from any member of the class.

Step 4, shows the important shift of face-to-face discussion to online discussion using Facebook as a medium. Although there is a shift in the loci of discussion; the content, pattern, and dialectic style are maintained.

Finally, in Step 5 is the Socratic discussion of the case using Facebook as the medium. Here, the same approach is applied as in Step 3. The difference is that, questions and/or answers are given by writing students' comments instead.

**Table 5 Syntax Justification of the Blended Socratic Method of Teaching (BSMT) Model for Undergraduate Business Students**

<b>Steps</b>	<b>Process</b>	<b>Justification</b>
<b>Step 1</b>	Group assignment, reading and writing of a business case study	<ul style="list-style-type: none"> <li>- One of the prominent qualities of business students is their ability to work in teams (Colby, et al., 2011)</li> <li>- Active learning methods appeal to students in the affective domain, motivating them to engage with the material (SERC, Carlton College, 2010)</li> </ul>
<b>Step 2</b>	Class presentation of business case analysis	<ul style="list-style-type: none"> <li>- Learning occurs most effectively when concepts and techniques are experienced not in an abstraction but in a realistic situation (Kuh, 2008)</li> <li>- Exposing students to a “chunk of reality” (Lindberg, et al., 2001)</li> </ul>
<b>Step 3</b>	Socratic questioning or discussion in class	<ul style="list-style-type: none"> <li>- The method is considered as the “coping-stone” of the educational system according to Plato, 375 BC/2003);</li> <li>- The oldest and still the most powerful, teaching tactic for fostering critical thinking (Paul and Elder, 1997);</li> <li>- A relevant framework for actively engaging students with the critical thinking process (Reich, 2003); and</li> <li>- The “finishing touch” for the process of learning (Whiteley, 2006).</li> </ul>
<b>Step 4</b>	Posting the case study in the class Facebook account	<ul style="list-style-type: none"> <li>- Blended courses can lead to increased student engagement (Brat, n.d.)</li> <li>- Students in online conditions performed modestly better, on average, than those learning the same material through traditional face-to-face instruction (U.S. Department of Education, 2010).</li> </ul>
<b>Step 5</b>	Online Socratic discussion	<ul style="list-style-type: none"> <li>- A virtual classroom setting (VCS) has more positive features to engage students in critical thinking (Whiteley, 2006)</li> <li>- All the mentioned features of Socratic method of teaching according to Plato, Paul and Elder, and Reich as mentioned in stage 3.</li> </ul>

\* Instructor's feedback in all stages



Table 5 summarizes the syntax justification of the Blended Socratic Method of Teaching (BSMT) model. Instructor's feedback shall be presented in all steps.

### **Step 1: Case Method Reading and Writing Case Analysis**

According to a prominent authority, one of the prominent qualities of business students are the ability to work in teams [31], as such students in this teaching model will work in a team in investigating and writing the case analysis. Additionally, this method is considered effective as it promotes active learning. This method appeals to students in the affective domain, motivating them to engage with the material [96].

### **Step 2: Case Method**

There are many benefits of using the case method of learning. Learning occurs most effectively when concepts and techniques are experienced not in an abstraction but in realistic situations [30]. Through this method, students are exposed to "a chunk of reality" [29], which will they be in the future.

### **Step 3: Socratic Questioning/Discussion**

The core of this study is the use of the Socratic method of teaching. It is an approach by which one seeks the truth via a process of questions and answers [77]. Chafee [49] defined the Socratic method as an investigation of complex issues through a question and answer format. This method used a dynamic approach of questioning and intellectual analysis to draw answers out of people rather than lecture them. The questioning strategy is the foundation of the Socratic approach [16]. According to many authorities, the Socratic method is the heart of critical thinking. The method is considered as the "coping-stone" of the educational system according to Plato; the oldest and still the most powerful, teaching tactic for fostering critical thinking [78]; a relevant framework for actively engaging students with critical thinking process [17]; and the "finishing touch" for the process of learning [16].

### **Step 4: Blended Learning**

Blended courses have proven to be among the most popular choices for students at institutions where they are offered [24]. Many authorities cited that blended courses can lead to increased student engagement [25], and students in online conditions performed modestly better, on average, than those learning the same

material through traditional face-to-face instruction [26]. Having “digital natives” as students, this approach will tremendously engage and help in students’ retention.

### **Step 5: Online Socratic Discussion**

Traditional classroom setting is getting less popular to students in the higher education these days. According to recent findings, the online or virtual classroom setting (VCS) has more positive features to engage students in critical thinking [16] and likewise all the mentioned features of Socratic Method of teaching according to Plato, Paul and Elder, and Reich mentioned in stage 3.

Instructor’s feedback is present in all stage of the instructional model. The instructor will ask questions which will help in generating dialogue, encouraging students to build on each other’s comments, probe each other’s assumptions and hypotheses, communicate with one another (horizontal learning), and reach consensus on recommendations for action. The feedback is considered significant as it will determine that the dialogue is still in the given topic and the instructor will continuously monitor the dialogue process.

Each stage of the model contributes to the enhancement of students’ critical thinking. Having said that, the RED Model of critical thinking referring to the recognizing assumptions, evaluating arguments, and drawing conclusions are evidently and satisfactorily satisfied as follows:

1. Through reading and writing the case analysis, students start to recognize assumptions from the given facts and other surrounding circumstances of the case;
2. Through presentation of the case analysis, students evaluate arguments presented and draw conclusions as well, by proposing solutions/alternatives to the problems presented in the case.
3. In the third stage, where there is face-to-face classroom Socratic discussion, students start from evaluating assumptions, evaluating arguments, and in some cases, ultimately reaching a conclusion.
4. The fourth stage will simply involve the process of posting the case already discussed in class. This is likewise an important stage as it signals the shift of



classroom experience from traditional face-to-face classroom discussion to online or virtual classroom discussion.

5. The last stage ultimately involves the development of the three key elements of the RED Model of thinking. In this stage, students might discover new facts again through continuous question and answer. This might bring in new perspectives that will result to further enhancement of the students' critical thinking.

To better understand the Blended Socratic Method of Teaching (BSMT) Model for undergraduate business students, the five steps are further subdivided into sub-steps or activities.

#### **Step 1: Group assignment, Reading and Writing of a Business Case Analysis**

This step is further subdivided in different activities namely:

1. Students will be grouped into three to four people at the beginning of the semester. Students are free to choose who will be in their group.
2. The cases will be assigned to each group and they can choose the case that they would like to present. Cases shall be limited only to the list provided in class.
3. The date of the case presentation will be announced.
4. The group will start analyzing the case assigned.

The case analysis will be written according to the prescribed format.

#### **Procedure of the Business Case Analysis**

In writing the business case analysis, the steps below shall be complied with. All the steps involved seek to enhance the critical thinking skills of students. The case study will be used as an integral tool/activity that provides the support system in enhancing critical thinking skill.

1. Case assignment to a group of four students

As mentioned above, students working in a group promote active learning according to Velenchik (2010). Through that, students become more engaged with the material (business case study) and prepare them to work collaboratively with the other members of the group.

## 2. Identify the case objective/s

In this step, in order to identify the case objectives, the students have to understand clearly the facts presented in the case. Here, students develop the ability to separate fact from opinion (recognize assumptions) as they have to identify specifically the goals in doing the case study, which will later on set the direction of understanding and solving the problem/s involved in the case.

## 3. Identify the problem/s

The case problem/s is/are directly connected to the case objectives initially identified by the students. As important as identifying the case objectives, students likewise develops their recognition of assumptions by segregating facts from opinions presented in the case.

4. State the facts and nature of the case including the facts of the case, characters, incidents, and other important information.

In this step, after the students analyze the case in detail, the case will be digested and the characters, incidents or events as well as other important information will be written bearing in mind the case objectives and problems priorly identified. Recognizing assumptions and evaluating arguments are clearly enhanced among students. Likewise, the students could have a hint as well of deciding the course of action.

## 5. Identify alternative courses of action

Here, the students will identify several alternative courses of action that they may choose from to solve the problems involved in the case. There is no limit to the number of the alternatives. Only one alternative will not be allowed. The advantages and disadvantages of each alternative will be identified. Evidently, all the essential key elements of the RED model of critical thinking are present in this step: recognizing assumptions, evaluating arguments, and drawing conclusions.

## 6. Conclusion and recommendation

This step will require students to choose the best alternative course of action. The alternative chosen will be discussed as regards to its advantages and disadvantages. Students will likewise suggest some actions in order to lessen the effects of the disadvantages identified.



After choosing the best alternative course of action, students will sum-up the case by stating recommendations about the case.

The students develop in this stage the ability to decide the course of action (drawing conclusion) which is one of the essential elements of enhancing critical thinking skills.

The students are encouraged to consult with the instructor during the case analysis stage.

### **Step 2: Presentation of Business Case Analysis**

During the presentation of the case, students are required to comply with the following:

1. Students will prepare a PowerPoint presentation.
2. The presenters will provide a hard copy of the case analysis to the instructor.
3. Those who are not presenting will pay close attention to the presentation.
4. The first part of the presentation is the facts of the case: nature of the case, character, events/incidents, and other important facts.
5. Discuss issues and problems.
6. Present alternative course of action.
7. Answer the problems.
8. State conclusion.

### **Step 3: Socratic Discussion in Class**

The instructor has a class card for each student where the title of the case and the week number is written. The student will be called by random using the card. Then the questioning starts.

During this stage, the following are its sub-stages/activities:

1. The instructor/student asks probing questions.
2. The presenter/ student /instructor will ask more probing questions.

There is no limit to the questions. No answer will be given except for some factual questions.

3. The members of the class evaluate the questions and provide more arguments and probing questions.

4. The instructor concludes the discussion.

**Step 4: Posting the Case in the Facebook Account of the Class**

After the case presentation and class discussion, the instructor will post the case analysis to the Facebook account named “Blended Socratic Method of Teaching.”

**Step 5: Online Socratic Discussion**

It involves the following sub-steps/activities:

1. Students will be instructed to add their friend in Facebook, “Blended Socratic Method of Teaching.”

2. The instructor will post a summarized version of the case on the Facebook account.

3. Students will be instructed to post their questions and/or answers. The instructor will continuously monitor and ask probing questions to students, but will not give answers.

There is no specific period of time to finish the discussion for each case. Students can go back to the previous case to post comments/answer.

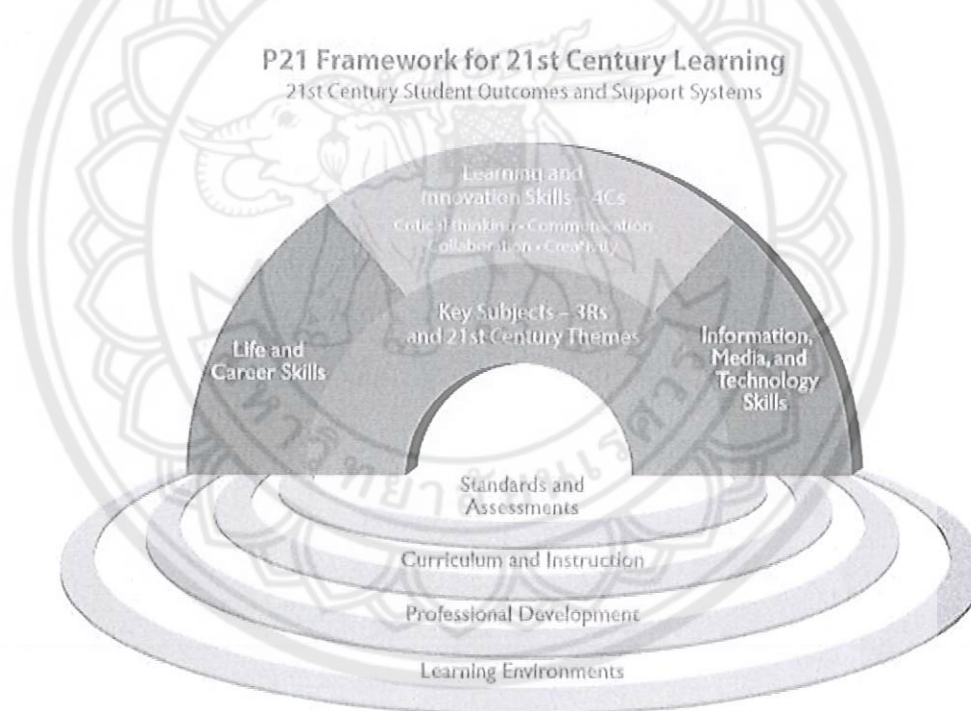
**Instructor’s Feedback**

The instructor will act as the facilitator and will join the discussion. The instructor can also ask questions which will help in generating more inquiries for the discussion until reaching the answer to the questions.



## 21<sup>st</sup> Century Skills

Recent trends in technology are perceived to transform traditional instruction have prompted some education reformers to argue that the traditional curriculum and instruction is not enough: schools must provide students with a broader set of “21st century skills” to thrive in a rapidly evolving, technology-saturated world [11]. As society and technology change so does literacy, as such the 21st century demands that a literate person possess a wide range of abilities and competencies [97]. The Partnership for 21<sup>st</sup> century skills [9] has emerged as a major advocate for 21<sup>st</sup> century skills according to Greenstein [98]. Such organization came up with a framework of the 21<sup>st</sup> century skills.



© 2009 Partnership for 21st Century Learning (P21)  
[www.P21.org/Framework](http://www.P21.org/Framework)

**Figure 9 P21 Framework for 21<sup>st</sup> Century Learning**

The four main components of the model 1) core subjects, 2) learning and innovation skills, 3) information, media and technology skills, and 4) life and career skills. According to the P21, 21<sup>st</sup> century skills include as follows:

Core subjects include English, reading or language arts; world languages; arts; mathematics; economics; science; geography; history; and government and civics.

1. Learning and innovation skills are those possessed by students who are prepared for the 21<sup>st</sup> century and include creativity and innovation, critical thinking, and communication and collaboration.

#### 1.1 Creativity and Innovation

##### Think Creatively

1. Use a wide range of idea creation techniques (such as brainstorming)
2. Create new and worthwhile ideas (both incremental and radical concepts)
3. Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts
4. Work Creatively with Others
5. Develop, implement and communicate new ideas to others effectively
6. Be open and responsive to new and diverse perspectives; incorporate group input and feedback into the work
7. Demonstrate originality and inventiveness in work and understand the real world limits to adopting new ideas
8. View failure as an opportunity to learn; understand that creativity and innovation is a long-term, cyclical process of small successes and frequent mistakes

##### Implement Innovations

Act on creative ideas to make a tangible and useful contribution to the field in which the innovation will occur



## 1.2 Critical Thinking and Problem Solving

### Reason Effectively

Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation

### Use Systems Thinking

Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems

### Make Judgments and Decisions

1. Effectively analyze and evaluate evidence, arguments, claims and beliefs
2. Analyze and evaluate major alternative points of view
3. Synthesize and make connections between information and arguments
4. Interpret information and draw conclusions based on the best analysis
5. Reflect critically on learning experiences and processes

### Solve Problems

1. Solve different kinds of non-familiar problems in both conventional and innovative ways
2. Identify and ask significant questions that clarify various points of view and lead to better solutions

## 1.3 Communication and Collaboration

### Communicate Clearly

1. Articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts
2. Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions
3. Use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade)
4. Utilize multiple media and technologies, and know how to judge their effectiveness a priori as well as assess their impact

5. Communicate effectively in diverse environments (including multi-lingual)

Collaborate with Others

1. Demonstrate ability to work effectively and respectfully with diverse teams

2. Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal

3. Assume shared responsibility for collaborative work, and value the individual contributions made by each team member

2. Information, media, and technology skills are needed to manage abundance of information and also contribute to the building of it. Also, to be effective in the 21st century, citizens and workers must be able to create, evaluate, and effectively utilize information, media, and technology. These include information literacy; media literacy; and information, and technology (ICT) literacy.

#### 2.1 Information Literacy

Access and Evaluate Information

1. Access information efficiently (time) and effectively (sources)

2. Evaluate information critically and competently

3. Use and manage information

4. Use information accurately and creatively for the issue or problem at hand

5. Manage the flow of information from a wide variety of sources

6. Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information

Media Literacy

1. Analyze media

2. Understand both how and why media messages are constructed, and for what purposes

3. Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors



4. Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of media

5. Create media products

6. Understand and utilize the most appropriate media creation tools, characteristics and conventions

7. Understand and effectively utilize the most appropriate expressions and interpretations in diverse, multi-cultural environments

#### ICT Literacy

1. Apply technology effectively

2. Use technology as a tool to research, organize, evaluate and communicate information

3. Use digital technologies (computers, PDAs, media players, GPS, etc.), communication/networking tools and social networks appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy

4. Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information technologies

3. Life and career skills are those abilities necessary to navigate complex life and work environments. These include flexibility and adaptability and self-direction, social and cross-cultural skill, productivity and accountability, and leadership and responsibility.

#### Flexibility and Adaptability

1. Adapt to change

2. Adapt to varied roles, jobs responsibilities, schedules and context

3. Work effectively in a climate of ambiguity and changing priorities

4. Be flexible

5. Incorporate feedback effectively

6. Deal positively with praise, setbacks and criticism

7. Understand, negotiate and balance diverse views and beliefs to reach workable solutions, particularly in multi-cultural environments

### Initiative and Self-direction

1. Manage goals and time
2. Set goals with tangible and intangible success criteria
3. Balance tactical (short-term) and strategic (long-term) goals
4. Utilize time and manage workload efficiently
5. Work independently
6. Monitor, define, prioritize and complete tasks without direct oversight
7. Be self-directed learners
8. Go beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities to gain expertise
9. Demonstrate initiative to advance skill levels towards a professional level
10. Demonstrate commitment to learning as a lifelong process
11. Reflect critically on past experiences in order to inform future progress

### Social and Cross-cultural skills

1. Interact effectively with others
2. Know when it is appropriate to listen and when to speak
3. Conduct themselves in a respectable, professional manner
4. Work effectively in diverse teams
5. Respect cultural differences and work effectively with people from a range of social and cultural backgrounds
6. Respond open-mindedly to different ideas and values
7. Leverage social and cultural differences to create new ideas and increase both innovation and quality of work

### Productivity and Accountability

1. Manage Projects
2. Set and meet goals, even in the face of obstacles and competing pressure
3. Prioritize, plan and manage work to achieve the intended result
4. Produce Results



5. Demonstrate additional attributes associated with producing high quality products including the abilities to:

6. Work positively and ethically
7. Manage time and projects effectively
8. Multi-task
9. Participate actively, as well as be reliable and punctual
10. Present oneself professionally and with proper etiquette
11. Collaborate and cooperate effectively with teams
12. Respect and appreciate team diversity
13. Be accountable for results

#### Leadership and Responsibility

1. Guide and lead others
2. Use interpersonal and problem-solving skills to influence and guide others toward a goal
3. Leverage strengths of others to accomplish a common goal
4. Inspire others to reach their very best via example and selflessness
5. Demonstrate integrity and ethical behavior in using influence and power
6. Be responsible to others
7. Act responsibly with the interests of the larger community in mind

According to Greenstein [98], the theoretical model of the 21<sup>st</sup> century skills are organized into four groups, each comprising three to four components: 1) thinking includes creativity, critical thinking, and metacognition; 2) working involves communication and collaboration; 3) information and technology literacies are the tools for working; and 4) citizenship, life skills, and personal responsibility are necessary for living in the world.

On the other hand, the Institute of Museum and Library Services (IMLS) Project Team and Task Force [99] considered the list of skills commonly referred to as "21st Century Skills." The resulting list includes the following additions: Basic Literacy, Scientific and Numerical Literacy, Visual Literacy, Cross-Disciplinary Skills, and Environmental Literacy.

Comparably, the National Research Council committee in the US (NRC), [100] collapsed the five skills into three broad clusters as shown below:

1. Cognitive skills: non-routine problem solving, critical thinking, systems thinking;
2. Interpersonal skills: complex communication, social skills, teamwork, cultural sensitivity, dealing with diversity; and
3. Intrapersonal skills: self-management, time management, self-development, self-regulation, adaptability, executive functioning.

### The Seven 7 C's of the 21<sup>st</sup> Century Teaching

Educators are also focusing their attention on the so-called seven C's of the 21<sup>st</sup> century teaching developed by Ronald Ferguson, from the Harvard Kennedy School, has categorized the characteristics of good teaching into seven areas based on surveys given to students in thousands of classrooms. The seven C's focuses on behavioral strategies that can be useful in a learning environment. Cited in the article of Liakakos [101], the author mentioned that Ferguson [102] notes that teaching has a range of goals, from how much students learn as measured by an exam to creating self-directed learners who love learning for its own sake. Also, Ferguson was cited saying that teachers define what they care about in the learning experiences they create for students and should be regularly monitoring how well they are meeting their goals. The seven C's are below:

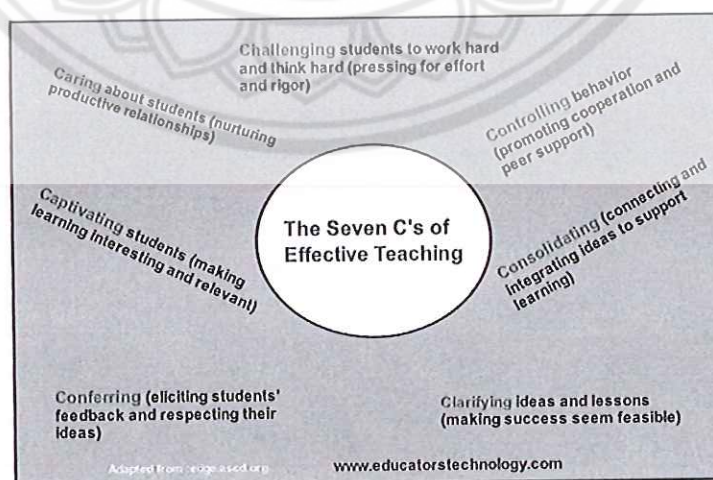


Figure 10 Seven C's of the 21<sup>st</sup> Century Teaching, Adapted from Ferguson



Ferguson [102] explained the meaning of the seven C's as follows:

Care. Teachers help students feel emotional safe and go out of their way to help.

Control. Teachers are able to maintain order and keep the classroom calm and students' on-task.

Clarify. Teachers are able to diagnose students' skills and knowledge, and then are able to explain ideas in multiple ways to help each students grasp concepts and clear up confusion.

Challenge. Teachers press students to reason their way through challenging questions and confront students if their efforts is unsatisfactory.

Captivate. Teachers make the material interesting and relevant to what students care about.

Confer. Teachers ask students for their views and provide positive reinforcement for their efforts. Teachers also encourage students to express themselves to one another.

Consolidate. Teachers help students organize material to help them remember and reason. They help with reviewing and summarizing skills by showing students how to find relationships between ideas and identity patterns.

There are some authorities claiming that the 21<sup>st</sup> skills and the seven C's should be integrated in order to create a learning environment suit for digital natives and at the same time meeting the desired qualities of workforce by the employers.

### **Student-Centered Learning**

An important topic in the literature review is the student-centered learning. The Blended Socratic Method of Teaching (BSMT) is a type of instructional models which focuses on students/learners rather than the teacher or lecturer.

Many terms have been linked with student-centered learning, such as flexible learning [13] and experiential learning [103]. The concept of student-centered learning has been credited as early as 1905 to Hayward and in 1956 to Dewey's work [104]. The term student-centered learning was also associated with the work of Piaget and more recently with Malcolm Knowles [103].

Nowadays, there is a critical shift in mission and vision of higher education from an instruction paradigm in which instruction is delivered from to “transfer knowledge from faculty to students” to a learning paradigm in which universities produce learning through “student discovery and construction of knowledge”. In this way, the focus of instruction is learning instead of teaching.

In this regard, Collins and O’Brien [105] described student-centered instruction (SCI) as an instructional approach in which students influence the content, activities, materials and pace of learning. This learning model places the student (learner) in the center of the learning process. The instructor provides students with opportunities to learn independently and from one another and coaches those in the skills they need to do so effectively. In a similar vein, Gibbs [106] draws on similar concepts when he describes student-centered learning as those that emphasize learner activity rather than passivity; students’ experience on the course outside the institution and prior to the course; and process and competence, rather than content; where the key decisions about learning are made by the student through negotiation with the teacher.

Other authors articulate broader, more comprehensive definitions of student-centered learning. Lea, et al. [107] summarize some of the literature on student-centered learning to include the followings tenets: 1) the reliance on active rather than passive learning, 2) an emphasis on deep learning and understanding, 3) increased responsibility and accountability on the part of the student, 4) an increased sense of autonomy in the learner, 5) an interdependence between teacher and learner, 6) mutual respect within the learner-teacher relationship, and 7) a reflexive approach to the teaching and learning process on the part of both teacher and learner. Some of the descriptions of student-centered learning like responsibility on their own learning and avoiding passivity on the part of the student/learner are also present in the definition of Collins and O’Brien [105] and O’Brien and Gibbs [106].

Moreover, the SCI approach according to Collins and O’Brien [105] includes such techniques as substituting active learning experiences for lectures, assigning open-ended problems and problems requiring critical or creative thinking, involving



students in simulations and role plays, and using self-paced and/or cooperative (team-based) learning.

In Thailand, educators' goals are emphasizing student-centered approach of learning, but the reality does not support the goals. According to Raktham [108], there are many different and overlapping factors that could explain patterns of behavior of Thai students in class. For example, lack of student's participation could be explained by both power-distance between teachers and students and the fear of rejection as a consequence of showing academic enthusiasm. Teacher-centered style describes Thai classrooms and the students' participation in class is rare. This passive learning is deep-rooted in classroom culture where Thai students are taught to be passive, obedient and respectful to teachers. This attitude creates a compliance culture where there is considerable reliance on teachers. Teachers who tried to encourage students to direct their own learning or to think critically tended to receive negative feedback from the students as students believed that such teachers failed to satisfy their job requirements and that this type of learning was too serious and difficult.

In summary, it appears from the literature that some view student-centered learning as the student doing more than the lecturer (active versus passive learning) while others have a much broader definition which includes both of these concepts but, in addition, describes the shift in the power relationship between the student and the teacher/instructor.

In order to fit the criteria of student-centered learning many approaches of teaching were developed. These approaches exemplified the characteristics of student-centered teaching as follows: 1) Active learning [109], 2) Question-directed instruction, 3) Inquiry-based Learning, and d) Problem-based Learning.

### **Teacher-centered vs. Learner-centered Paradigms**

To better emphasize what is student-centered or learner centered learning, the distinction between them with teacher-centered must be looked upon. The table below is distinction made by Huba and Freed [110].

**Table 6 Comparison of Teacher-centered and Learner-centered Paradigms**  
**(Learner-Centered Assessment on College Campuses by Huba and Freed)**

<b>Teacher-Centered Paradigm</b>	<b>Learner-Centered Paradigm</b>
Knowledge is transmitted from professor to students.	Students construct knowledge through gathering and synthesizing information and integrating it with the general skills of inquiry, communication, critical thinking, problem solving and so on.
Students passively receive information.	Students are actively involved.
Emphasis is on acquisition of knowledge outside the context in which it will be used.	Emphasis is on using and communicating knowledge effectively to address enduring and emerging issues and problems in real-life contexts.
Professor's role is to be primary information giver and primary evaluator.	Professor's role is to coach and facilitate. Professor and students evaluate learning together.
Teaching and assessing are separate.	Teaching and assessing are intertwined.
Assessment is used to monitor learning.	Assessment is used to promote and diagnose learning.
Emphasis is on right answers.	Emphasis is on generating better questions and learning from errors.
Desired learning is assessed indirectly through the use of objectively scored tests.	Desired learning is assessed directly through papers, projects, performances, portfolios, and the like.
Focus is on a single discipline.	Approach is compatible with interdisciplinary investigation.
Culture is competitive and individualistic.	Culture is cooperative, collaborative, and supportive.
Only students are viewed as learners.	Professor and students learn together.



From Table 6, it can be seen that the teaching goal of the teacher-centered paradigm is to cover the course being taught, whereas student-centered paradigm are to learn how to use the discipline and how to integrate disciplines to solve complex problems. When it comes to the course structure, the teacher/instructor covers the topics while on the second one, the students master the learning objectives. Similarly, it is shown that students learn in the first paradigm by listening, reading, and independent learning instead of active learning. On the other hand the second paradigm presented that students learn by constructing knowledge by integrating new learning into what they already know and learning is viewed as a cognitive and social act. Finally, the first paradigm emphasizes pedagogy of teaching based on delivery of information, whereas the second paradigm is based on engagement of students.

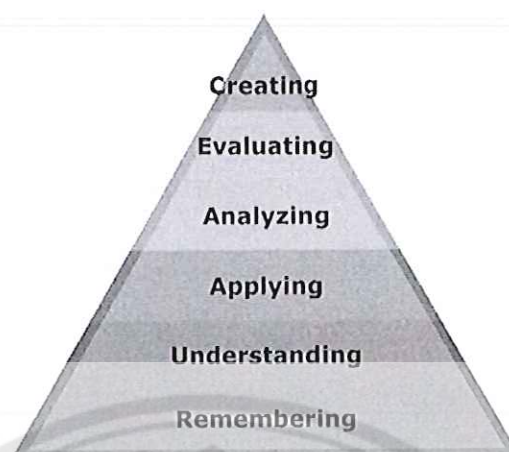
In conclusion, the Blended Socratic Method of Teaching (BSMT) presented more of the characteristics of the student-centered approach to learning rather than the teacher-centered paradigm. The BSMT model emphasizes active participation of the student in the learning process, and they take responsibility for constructing knowledge in the process of using the model.

### **Student-Centered Learning and Critical Thinking**

The learner-centered paradigm departs from traditional teaching models by focusing on students more than teachers and learning more than teaching emphasizes critical thinking along with active learning, and real-world assignments [111]. By using the student-centered approach, critical thinking takes students deeper in their learning.

Some of the qualities that employers are looking for in graduates are solving problems and using higher level thinking which refers, to critical thinking [112]. Learner-centered teaching focuses on developing critical thinking skills by intentionally challenging the students to do more than just recall facts and figures.

The most common framework used to explain deeper levels of critical thinking is the one developed by Benjamin Bloom, in 1956. The Taxonomy of Educational Objectives described and explored six levels of critical thinking in the cognitive domain. In 2001, this taxonomy was revised by Anderson, et al. [113], incorporating new knowledge. Essentially, the six levels of critical thinking include:



**Figure 11 Bloom's Taxonomy [114]**

**Source:** Revised by Anderson, et al. [113]

Remembering refers to retrieving, recognizing, and recalling relevant knowledge from long-term memory.

Understanding refers to constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.

Applying refers to carrying out or using a procedure through executing or implementing.

Analyzing means breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.

Evaluating refers to making judgments based on criteria and standards through checking and critiquing.

Creating means to put the elements together to form a coherent or functional whole. It also refers to reorganizing elements into a new pattern or structure through generating, planning, or producing.

Within learner-centered teaching, a major emphasis should be to help students progress in their critical thinking skills. Although critical thinking does not necessarily entail hierarchical or linear processing such as cognitive processing, it does involve operation at a particular knowledge, comprehension, application, analysis, synthesis,



or evaluation level. For example, one must have knowledge in a subject area to think critically in the area.

## **Business Students**

### **The Business Students**

Preparation for business careers was identified nearly a century ago as one of the important missions of higher education [31]. In addition, Flexner in 1923 as cited in Colby, et al. [31] argued that there were three kinds of students served by higher education: future scholars, future professionals, and future businessmen and businesswomen. Likewise, he added that an ordinary citizen interacts with businesswomen and businessmen far more frequently than with members of others professions, hence the focus of this study is the undergraduate business students.

In the business setting, failure to think critically can result in missed opportunities, faulty decisions, inefficiencies and ineffectiveness [45]. They added that as the pace of change and the complexity of problems in the business world become more compressed and convoluted; the failure to think critically has far-reaching implications that come with financial, social, and personal costs.

The ability to think critically has always been important for success in business. Business schools have long argued that they foster critical thinking skills, both curriculum design and through course delivery [53]. However such claims are seldom backed by sound empirical design and experimentation. Likewise the same authors added that the competency that next-generation leaders lack the most is strategic thinking, which hinges on critical thinking. Aside from the proof mentioned, the researcher through observation and personal experience witnessed the deficiencies of her business students to pursue critical thinking in class. The deficiencies are exemplified by the inability to show connection or link situations or events, inability to act/respond in case of complexity, and inability to share and respond using their own ideas and opinions.

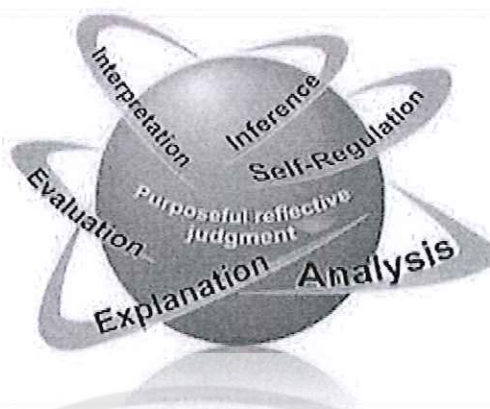


Figure 12 Core Critical Thinking skills [45]

The findings of expert consensus regarding the core critical thinking skills and habits of mind published in *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction* with Peter Facione as the principal investigator was later on confirmed by a study of 200 policy makers, employers, and faculty members at Pennsylvania State University [45].

Spitzer and Evans [115] identified critical thinking as the essential mental ability behind business success; they offered no detailed description or explanation of how it occurs.

#### **Qualities that Business Students Should Have**

Teaching students how to think is a universal goal of educational institutions [14]. However, in his research he concluded that the efforts to promote critical thinking among business students are not adequate.

What does it mean to be an educated person? An educated person is capable of three interacting and complementary modes of thought: analytical reasoning, the ability and disposition to take multiple perspectives when confronting a complex decision or judgment, and finding and making connections of personal meaning between what one does and one intends to become. Thus, a business education prepares a student to dig deeply, critically, and analytically from different points of view [31].



Moreover, business professionals should have a wide-ranging and versatile understanding of the world [31]. Strategic and critical thinking should be possessed by business professionals so that they can provide the interconnection of human and natural processes and the large-scale environment on which the flourishing of business depends [31]. This involves not only strategic and critical thinking about the advantage to the firm but likewise the effects of business activity on others sectors of society, including government, education, culture, and communities.

The prominent qualities of business students are ability to work in teams, enthusiasm for competition, and poise and preparedness in making public presentations, and seriousness of purpose [31]. These are all habits of the mind.

In this section, justification was present as to why the business students should be the subject of the study. It has been proven for decades that people came in contact with businessmen more often than any other profession, hence the importance of having them as the subject of the study. The qualities of the business students states that they should be capable of three interacting and complementary modes of thought: analytical reasoning, the ability and disposition to take multiple perspectives when confronting a complex decision or judgment, and finding and making connections of personal meaning between what one does and one intends to become. Thus, a business education prepares a student to dig deeply, critically, and analytically from different points of view.

## **Business Case Analysis**

### **The Case Study Method**

Case study method or business case analysis involves giving students a real historic business situation consisting of a detailed factual description of an issue faced by an organization together with the surrounding facts, circumstances, events, and management opinions [29]. Besides, case studies motivate greater student learning through active involvement and enhance increased coursework relevancy and applicability by exposing students to “a chunk of reality” [29]. Through case studies, students are encouraged to engage in a close reading of the case, finding and observing all the data involved in the case, interpreting the data, and analyzing and making

inferences about the data, evaluating the data, explaining the pros and cons of each alternative before a making decision to choose the best alternative. In short, students are required to consider the problem at all possible angles before reaching a decision.

Case studies are inevitable in teaching business students. However, as argued by Steven M. Shugan [116] and Philips and Vaidanathan [117], business cases can be valuable in stimulating students to think critically and in facilitating lectures, but they are not to be used as a substitute for lectures. As to when the business cases should come in, some [118] found it best to discuss before explaining the relevant theory in class because “case studies can demonstrate the relevance of theory and motivate students to learn and understand it.” Similarly, Kuh [30] affirmed that business programs embody an important consistent finding of research on learning: that learning occurs most effectively when concepts and techniques are experienced not in an abstraction but in context so that learners can immediately grasp the significance of key ideas or skills by applying them to realistic situations.

The case study method is presented in this section. It was found that this method is effective in providing students with real scenarios which will help students to be familiar with real work settings, active learning, and a constructivist approach as well. The case study method is a method of teaching whereby learners are exposed to real situations requiring learner’s active involvement and stimulating critical thinking. It also demonstrates relevance to theory that motivates students to learn and understand in realistic situations.

## **Related Researches**

### **Blended Learning and Critical Thinking**

This part will discuss about the different studies showing how students enhanced their critical thinking skills using blended learning.

The first research was the one conducted by the Rand Corporation. Findings showed that graduates who had undergone through a blended learning called Distributed Blended Learning (DBL) gained a moderate or substantial improvement in their critical field-grade skills [92].



In another research conducted to undergraduate students at Rajabhat University in Thailand, a blended instructional model was developed and implemented with 281 students in an Information Technology class [27]. There were two groups in this study consisting of experimental and control group. The findings showed that students indicated learning achievement and enhanced critical thinking after using the blended instructional model. Furthermore, it was stated in the findings that the experimental group who used the model showed better learning achievement and critical thinking in three subscales, including inference, recognition of assumptions, and evaluation of arguments as well as self-directed learning compared to the control group of students.

As a proof for the effectiveness of using blended learning, in a study conducted in Kirsehir High School, Turkey in a geography class, the 59 students were divided into groups as well consisting of experimental (28) and control groups (29) [119]. The findings showed that blended learning contributed more to student critical thinking dispositions and levels when compared to the traditional learning model.

Critical thinking abilities are enhanced by encouraging students to comment on their peers' online discussion postings. They learn to challenge their assumptions and to provide a rationale for their responses.

### **Blended Learning and Socratic Method of Teaching**

#### **Web Conferencing and the Socratic Method**

In a study conducted by Tucker and Neely [120], they proved that synchronous online learning using web conferencing known as Adobe Connect supports the Socratic Method of teaching used in business management classes under study. The findings showed that the web conferencing used was an effective tool that online students could master in a short period of time. Also, it was added that the Adobe Connect sessions offered in the case study provided an effective alternative for students to interact and engage in the course material using the Socratic method. This web conferencing tool likewise provides new opportunities to meet the needs of diverse learners.

### **Blended Learning, Socratic Method of Teaching and Critical Thinking**

Socratic method of teaching and hybrid learning environment promotes critical thinking to business students

According to Gilbert and Flores-Zambada [28], the Socratic method of teaching can now be effectively accomplished in an online discussion forum, a synchronous chat session, virtual environments, or in a wiki format. They added that using the pedagogy was proven to be both a positive experience for the instructor, and the students. They concluded that 1) the blended format makes the online component of the pedagogy more accessible in that students are able to ask questions in real time about assignment expectation and remission. Moreover, they receive additional course material, because different lessons are presented in both the online and face-to-face environments; 2) the triangulation method of instruction (online, on ground, and laboratory) caters to multiple learning styles - visual, auditory, and "hands-on." The variety helps keep students engaged, and exposes them to a larger skill set than would be possible in a purely face-to-face environment; and 3) critical thinking abilities are enhanced by encouraging students to comment on their peers' online discussion postings. They learn to challenge their assumptions and to provide a rationale for their responses. This study was conducted with business students studying Principles of Management. The blended classroom was comprised of 4 components namely: 1) on ground informational sessions; 2) course management system; 3) in-class lectures; and 4) laboratory time.

Incorporating the Socratic method to enhance online discussion, critical thinking, and student learning

In this meta-analysis research conducted by Whiteley [16], he established a theoretical and conceptual foundation on integrating the Socratic method of teaching in enhancing online discussion, critical thinking, and student learning with emphasis on business. He concluded that incorporating the Socratic approach as part of a Virtual Classroom Setting (VCS) in order to develop the critical thinking skills of students reflects the use of an instructional strategy that seeks to provide a sound pedagogical foundation or model in such an environment, something which is considered lacking in the online setting, citing Cifuentes and Shih [121]; Firdywek [122]; and Hopper



[123]. He added that incorporating Socratic Method of Teaching meets the need for a paradigm shift in terms of the approach to teaching and learning in a VCS. Such a method is perhaps more easily implemented in a VCS than it is in a TCS since students would be more at ease participating in an environment that is free from the “direct gazing eyes” of the other class members. It also measures the participation of students not in terms of quantity but in quality because of the opportunity to review the recorded, text-based digital dialogue. He likewise emphasized that the approach can also be used in a hybrid TCS-VCS course which may in fact increase the effectiveness of Traditional Classroom Setting (TCS).



## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This chapter discusses the methodology that was employed in the development of an instructional model to enhance the critical thinking skills of undergraduate business students.

The study was conducted according to the following phases based on the research objectives:

1. To survey the critical thinking skills of undergraduate business students.
2. To develop and validate the instructional model to enhance the critical thinking skills of the undergraduate business students.
3. To implement and determine the effectiveness of the instructional model.
4. To evaluate the level of satisfaction of undergraduate business students towards the instructional model.

#### **Phase I: To survey the critical thinking skills of undergraduate business students.**

##### **Population**

The population for this study consisted of all undergraduate business students enrolled in the Bachelor in Business Administration (B.B.A.) from first year to fourth year, majoring in Human Resource Management (HRM), Tourism Management, and International Business Management at Naresuan University International College (NUIC), first semester, academic year 2014. There is a total of 371 students.

The population was chosen using purposive sampling with the following criteria: background knowledge of the researcher on the population selected; willingness of the population to participate who can contribute appropriate data, both in terms of relevance and depth; and homogeneous population that illustrates similar characteristics (business students).



### **Instruments**

A standardized questionnaire (refer to Appendix 1) was used in the data collection instrument known as The Watson-Glaser Critical Thinking Appraisal (WGCTA).

#### **The Watson-Glaser Critical Thinking Appraisal (WGCTA)**

In this stage, the standardized critical thinking test that was used is known as Watson-Glaser Critical Thinking Appraisal (WGCTA) developed in 1980 by Goodwin Watson and Edward Maynard Glaser. It was used to assess the competencies in 3 skills areas referred to as the RED Model of critical thinking (Recognizing assumptions, Evaluating arguments, and Drawing conclusions). The test consists of 40 multiple-choice questions and could be completed in 50 minutes. The WGCTA awards one point for every correct answer.

The questionnaire has five sections with eight questions each: 1) inferences, 2) assumptions, 3) deductions, 4) interpreting information, and 5) arguments.

#### **Validity and Reliability**

The Watson-Glaser Critical Thinking Appraisal (WGCTA) was considered as a reliable and valid instrument in measuring critical thinking. According to the WGCTA Manual, the reliability was 0.77 to 0.81 for the UK standardization sample [60].

Before administering the test, the reliability test was likewise conducted with 100 students, which revealed 0.74 reliable using Cronbach's alpha.

#### **Data Collection Process**

Survey design was used in this step to identify the critical thinking skills of undergraduate business students.

**Pre-questionnaire:** First, a letter of approval to conduct the study was obtained from the Graduate School at Naresuan University. After permission had been granted, approval to conduct the study was obtained from Naresuan University International College. Third, the students were informed of the purpose of the study and the test, and an individual letter of consent (Appendix B) to participate was given to each student.

The issues of confidentiality and the rights of the research participants were emphasized too. There was no personal risk involved to the students selected on the issue of confidentiality of their answer as they do not have to divulge any information that will lead to their identification. The possible risk involved was the loss of time on the part of participants. The time range in completing the questionnaire was clearly explained to the students before the start of the processes. Additionally, the students were given the chance to decline to participate. That is why the students' participation is based on their freely volunteered informed consent.

**During and after questionnaire distribution:** Collective administration of the critical thinking test was done with 371 students. It was difficult to put the students in one classroom. As such, some NUIC lecturers were asked to administer the test. The researcher explained the test instructions in every classroom. Also, the researcher encouraged students to carefully read the directions and to ask questions before proceeding with the test. Lastly, the questionnaires were collected right after the time given for each test (50 minutes). The testing session was precisely timed. There was a 100% response rate. This was possible because of the help from the lecturers at NUIC who assisted the researcher in administering the test.

**Manner of keeping and disposing of the data collected through the questionnaire:** The questionnaires collected will be kept by the researcher for a period of two years. This period was made known to the students. The data collected will be stored or archived in a safe repository as determined by the researcher, and the same was made known to the students. In order to use or reuse the data, consent will be requested from the students. There will be restricted access to the information unless the students give consent. For paper documents obtained in the survey, the documents will be disposed of by shredding after two years.

### **Data Analysis**

The Watson-Glaser Critical Thinking Appraisal (WGCTA)

The overall performance on the test was scored according to the candidate's correct score obtained from the test. The score is interpreted as follows:



91 <sup>st</sup> percentile and above	- Well above average
71 <sup>st</sup> – 90 <sup>th</sup> percentiles	- Above average
31 <sup>st</sup> – 70 <sup>th</sup> percentiles	- Average
11 <sup>th</sup> – 30 <sup>th</sup> percentiles	- Below average
10 percentile and below	- Well below average

The students' scores was normed using the industry group-business provided by Watson-Glaser (Appendix 3). The percentile rank indicates an individuals' relative position in the norm group. To find the percentile rank of the students' raw score, locate the raw score from the right column in Appendix 3. For example, if a business student had a score of 25 use the business norms Appendix 3 for comparison. In this case, the percentile rank corresponding to a raw score of 30 is 33. The percentile falls within 31<sup>st</sup> – 70<sup>th</sup> percentile or equivalent to "Average". The SPSS program was used to determine the mean ( $\bar{x}$ ) and standard deviation (S.D.) and to analyze the result of the survey.

**Phase II: To develop and validate the instructional model to enhance the critical thinking skills of the undergraduate business students.**

#### **The Development of the Instructional Model**

The instructional model was developed in sequences as follows:

##### **1. Identify the critical thinking skills needed by the experimental group:**

The instructional model was developed using the results of the score in critical thinking test of the undergraduate business students. The results in Phase I was considered to study:

1.1 The RED-recognizing assumptions, evaluating arguments, and drawing conclusions, the critical thinking skills that undergraduate business students needed;

1.2 A self-directed learning through class presentation in groups;

1.3 The Socratic method, a learning approach that will encourage the students to discuss, ask and answer questions, and foster the RED;

1.4 Business case studies, teaching materials that will present a real life setting in business;

1.5 A 21st century skills that requires applying technology effectively as we have now a technology saturated world and digital natives as students.

1.6 A learner-centered approach of learning where the teacher act as a guide on the side;

2. Design the components of the instructional model:

An in-depth study of the components of the model, consisting of focus (learning objectives), syntax (instructional process), the principles of reaction, the social system (learning activities), support system (teaching materials), and application adapted from Joyce, et al. [33] were used in developing the teaching model.

3. Integration of the course description into the instructional model.

A course outline per week and for a total of ten weeks was designed emphasizing the use of the BSMT model and the application of the RED model of critical thinking.

**Validation: Expert Review for the Approval of the Model**

There were five experts (Appendix 4) who assessed the quality of the teaching model and the guidelines in using it. The criteria for the experts were as follows: a) ten years teaching experience in higher education; b) with doctoral degree; and c) in the field of the following: curriculum and instruction, business, education, and psychology.

**Instrument:** There were evaluation forms (Appendix 5 and 6) designed to assess the appropriateness of the BSMT model and the guidelines in using it. The evaluation for the model has two parts: 1) appropriateness of the BSMT model, and 2) conformity of the components of the BSMT model. Also, the evaluation for the guidelines in using the BSMT model has two parts: 1) how to use the BSMT model, and 2) appropriateness of the lesson plan. The evaluation forms were designed using rating scales of five levels (Likert Scale) with the following equivalents: 5 = Highly Appropriate; 4 = Appropriate; 3 = Neutral; 2 = Less Appropriate; and 1 = Least Appropriate.

**Data Analysis:** A software package for statistical analysis was used to determine the mean ( $\bar{x}$ ) and standard deviation (S.D.) and to analyze the ratings given by the experts.



**Phase III: To implement and determine the effectiveness of the instructional model.**

**Population:** The experimental group where the instructional model was used consisted of 40 third year students, majoring in Human Resource Management at the Naresuan University International College in the first semester of the academic year 2014. The sample was chosen using stratified sampling.

In this study Table 2 (Appendix G) for determining sample developed by Taro Yamane (1973) was used. This research determines the population of infinity ( $\infty$ ) for Precision (e) of  $\pm 10\%$ . The result from Table 2 reveals that the sample size of this research requires 40 samples.

### **The Implementation of the BSMT Model**

#### **Research Instruments:**

The research instruments used were as follows:

##### **1. Lesson Plan**

The lesson plan consisted of the following parts: overview, objectives, content, activities, teaching materials, and evaluation. There were ten lesson plans on ten different topics about business, prepared for ten weeks for three hours per week (refer to the Guidelines on How to Use the BSMT Model, Appendix H).

##### **2. Business Case Studies**

There were ten business case studies selected by considering the following: the topic is about real life setting; the cases are relevant to the study of business; and the cases presented situations and events requiring students to use the RED-recognizing assumptions, evaluating arguments, and drawing conclusions.

##### **3. Facebook Account**

A Facebook account called “Blended Socratic Method” was created by the researcher-instructor, where the 40 students were required to be a “friend.” The instructor posted a summarized version of the case on the Facebook account. Students were instructed to post their questions and/or answers. The instructor continuously monitored and asked probing questions, but did not give answers. The students continuously asked and/or answered probing questions. There was no specific period of time to finish the discussion for each case. Students can go back to the previous

case to post comments/answers even a new case has been posted. Lastly, the instructor concluded the discussion.

#### **Data Collection and Analysis:**

The data was collected during the implementation of the BSMT model embedded in 10 teaching weeks in the course. It was the guideline as well as a tool to enhance the critical thinking skills of undergraduate business students. After which, the data was gathered using the instructional model.

#### **Determination of Effectiveness of the Model**

##### **Instrument:**

In determining the effectiveness of the model, a pre-test and post-test used the modified version of the Watson Glaser Critical Thinking Appraisal (Appendix 9). The test has five sections: 1) inferences, 2) assumptions, 3) deductions, 4) interpreting information, and 5) arguments. The test is designed to specifically measure the RED-recognizing assumptions, evaluating arguments, and drawing conclusions.

**Reliability:** The modified version of the Watson Glaser Critical Thinking Test revealed 0.77 reliable using the Cronbach's alpha when tested with 100 undergraduate business students.

**Data Collection Process:** Pre-test, Post-test research design was used in Phase III-B. There were three steps involved:

1. Pre-test before the start of the session using the instructional model.
2. Teaching the undergraduate business students using the BSMT model.
3. Post-test after the completion of the ten weeks session using the instructional model.

**Data Analysis:** The data was analyzed using a software package for statistical analysis and was analyzed using the paired sample t-test to determine if there was a significant difference on the critical thinking skills of students before and after studying using the BSMT model.



**Phase IV: To evaluate the level of satisfaction of undergraduate business students towards the instructional model.**

**Population:** The experimental group consisted of 40 third year students, majoring in Human Resource Management at the Naresuan University International College in the first semester of the academic year 2014.

**Instrument:**

1. Satisfaction Survey

2. A satisfaction survey (Appendix J) towards the instructional model was administered to participants after the completion of the session. The satisfaction survey is comprised of two parts, the former using the rating scales (1-5) and the latter is an open-ended question format. The participants were given 40 minutes to complete the questionnaire. After such time, the questionnaires were collected. The lists of intervals that the participants used are as follows:

- 5 – Strongly Satisfied
- 4 – Satisfied
- 3 – Moderately Satisfied
- 2 – Fairly Satisfied
- 1 – Poorly Satisfied

**Validity:**

The questionnaire was tested for validity using expert review. There were three experts (Appendix K) who determined the validity of the questionnaire. The experts have the following criteria: with doctoral degree, more than ten years teaching experience in the university, and in the field of higher education, linguistics or business.

**Data Collection Process:** The data was collected as follows: 1) students were informed of the purpose of the satisfaction survey; 2) students were encouraged to read the directions carefully before proceeding with the test; 3) the satisfaction questionnaires were distributed to the students; 4) the questionnaires were collected after completion; and 5) the data collected was analyzed.

Confidentiality of the answers, preventing risks to participants, manner of keeping and disposing of data gathered through survey and interview was observed in the same manner as stated in Phase I.

**Data Analysis:** Data was analyzed in two ways namely:

1. Data analysis for the satisfaction survey was carried out using mean ( $\bar{x}$ ) and standard deviation (S.D.). A software package for statistical analysis was used in analyzing the data.

The Likert Scale will have the following equivalent:

4.50 – 5.00	=	Strongly Satisfied
3.50 – 4.49	=	Satisfied
2.50 – 3.49	=	Moderately Satisfied
1.50 – 2.49	=	Fairly Satisfied
0.00 – 1.49	=	Poorly Satisfied

2. Content analysis was used in interpreting the answers of students to the open-ended questions stated in the satisfaction survey. It is a technique for making inferences by systematically and objectively identifying special characteristics of the messages.



## CHAPTER IV

### RESULTS

This chapter presents the results in the development and validation of the Blended Socratic Method of Teaching (BSMT) Model to enhance the critical thinking skill of undergraduate business students. The results will be presented according to the four research objectives and were divided into four phases in the development of the teaching model.

1. Survey of the critical thinking skills of undergraduate business students.
2. Development and validation of the instructional model to enhance the critical thinking skills of the undergraduate business students.
3. Implementation and determination of the effectiveness of the instructional model.
4. Evaluation of the level of satisfaction of undergraduate business students towards the instructional model.

#### **Phase I: Survey of the critical thinking skills of undergraduate business students.**

In Phase I, the critical thinking test score of the total population was determined. Two findings will be presented in this phase: the critical thinking test score of the total population of undergraduate business students and the critical thinking test score of the population divided into three majors of study. The Watson-Glaser Critical Thinking Appraisal was used. The test was tested for its reliability with 100 business students, and the test revealed 0.74 reliability using Cronbach's alpha.

**Table 7 Overall Critical Thinking Test Score of Undergraduate Business Students**

			n = 371		Level of Critical Thinking
			$\bar{x}$	S.D.	
Critical Thinking Test Score			13.26	3.85	Well Below Average

The overall performance on the critical thinking test of 371 undergraduate business students was analyzed using mean ( $\bar{x}$ ) and standard deviation (S.D.). The undergraduate students consisted of students majoring in Bachelor in Business Administration (B.B.A.) Human Resource Management (HRM), Tourism Management and International Business Management (IBM). The total population was included in the administration of the critical thinking test.

The score revealed that the mean ( $\bar{x}$ ) is 13.26 and the standard deviation is (S.D.) is 3.85. Using the percentile provided by the Watson-Glaser, Table 8 (Appendix 3) revealed that the score falls within the 10 percentile or below which is interpreted as "well below average".

**Table 8 Critical Thinking Test Score of Subsections of Undergraduate Business Students**

Subsection	n = 371	
	$\bar{x}$	S.D.
1. Inferences	2.03	1.19
2. Assumptions	2.91	1.35
3. Deductions	2.66	1.37
4. Interpreting Information	2.74	1.46
5. Arguments	2.90	1.53



The test consists of five subsections, namely inferences, assumptions, deductions, interpreting information, and arguments, each comprising eight items. Table 8 above shows that the undergraduate business students scored in the critical thinking skills in each subsections as follows, inferences ( $\bar{x}$ =2.03 and S.D. = 1.19) assumptions ( $\bar{x}$ =2.91 and S.D. = 1.35), deductions ( $\bar{x}$ =2.66 and S.D. = 1.37), interpreting information ( $\bar{x}$ =2.74 and S.D. = 1.46) and arguments ( $\bar{x}$ =2.90 and S.D. = 1.53).

**Table 9 Critical Thinking Test Score by Major of Study**

Major	n = 371		Level of Critical Thinking
	$\bar{x}$	S.D.	
1. Human Resource Management*	13.51	4.48	Well Below Average
2. Tourism Management	12.25	3.42	Well Below Average
3. International Business Management	14.95	2.99	Well Below Average

\* The experimental group was taken

The total population was grouped into three according to their major of study namely: Human Resource Management (HRM), Tourism Management and International Business Management (IBM). Table 9 shows that the three groups of students scored “well below average” in the critical thinking test administered: HRM ( $\bar{x}$  = 13.51 and S. D. = 4.48); Tourism Management ( $\bar{x}$  = 12.25 and S. D. = 3.42); and IBM ( $\bar{x}$  = 14.95 and S. D. = 2.99). The scores fall within the 10 percentile and below, which is interpreted as “well below average”. Tourism Management scored the lowest score among the three groups followed by HRM, and the IBM students have better critical thinking skills than HRM and Tourism Management students.

The HRM group was chosen as the experimental group as it has one of the lowest scores in the critical thinking skills among the three majors. Likewise, the lecturer-researcher is teaching the Human Resource Management group. The findings in Table 7, 8 and 9 are alarming because eventually these students will join the workforce. As such, the results inspired the researcher to develop an instructional model that will enhance students RED—recognizing assumptions, evaluating arguments, and drawing conclusions.

**Phase II: Development and validation of the instructional model to enhance the critical thinking skills of the undergraduate business students.**

As presented in Phase 1, there is deficient critical thinking among undergraduate business students. These students will eventually be a part of the business world, and it is disturbing how the cycle of lack or deficient critical thinking will persist. Similarly, a study of theoretical and research findings leading to the enhancement of the critical thinking skills, particularly the RED—recognizing assumptions, evaluating arguments, and drawing conclusions, of the undergraduate business students were all analyzed and considered in the development of the model. Phase II, will be presented in two parts:

A: The Development of the Instructional Model; and

B: The Validation of the Experts of the Model. In part B, two tables will be presented: first is the experts' evaluation of the BSMT model, and second is the experts' evaluation of the guidelines or manual on how to use the BSMT model.



### A: The Blended Socratic Method of Teaching (BSMT) Model

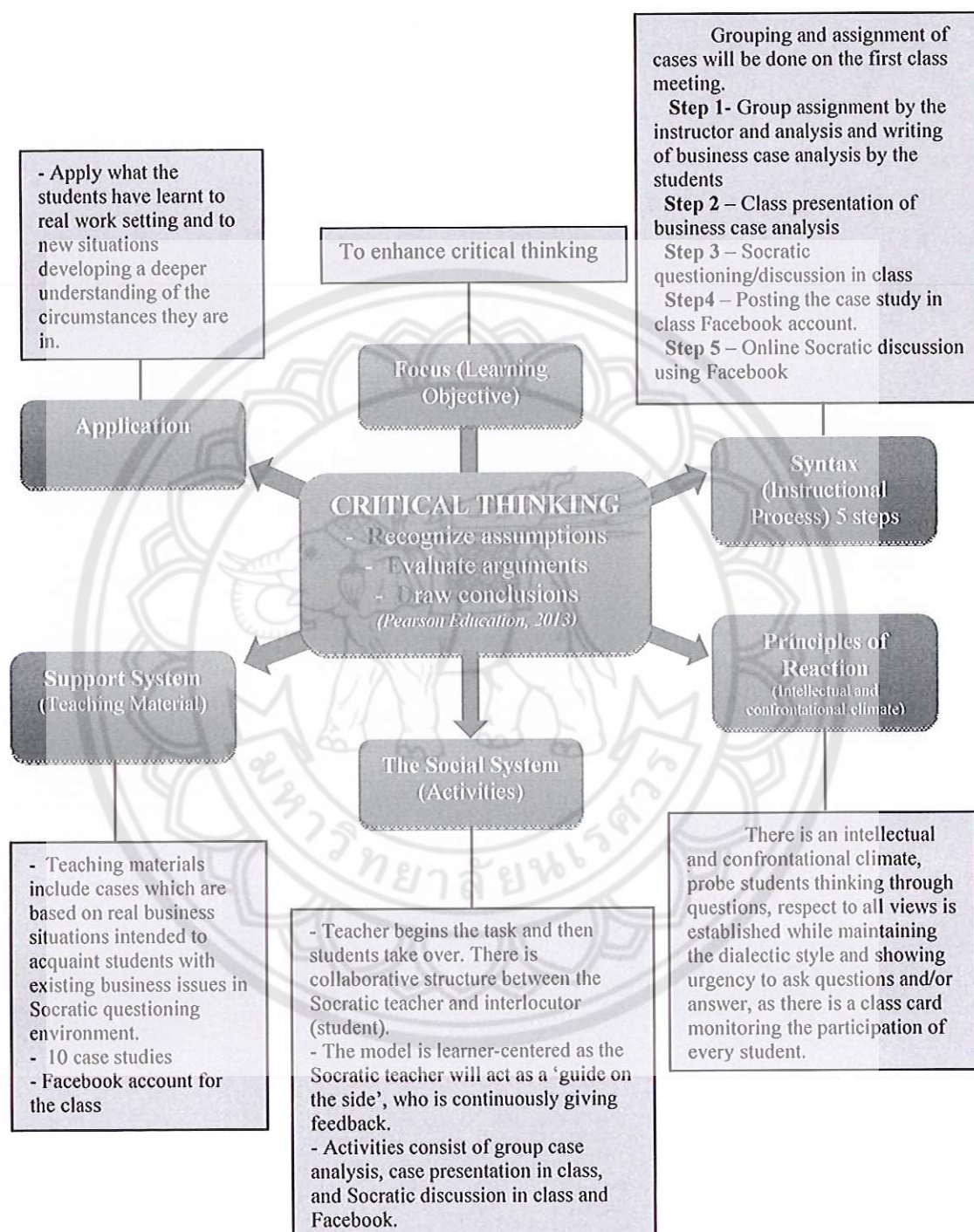


Figure 13 The Blended Socratic Method of Teaching (BSMT) Model

Figure 12 presents the essential components of the Blended Socratic Method of Teaching (BSMT) model that will provide an authentic and comprehensive learning method that will enhance the critical thinking skills of the undergraduate business students. The model has six components, namely, 1) Focus (Objectives of the model); 2) Syntax (Instructional Process); 3) Principles of Reaction (Teacher's reaction to students' responses); 4) The Social System (Activities); 5) The Support System (Teaching Materials); and 6) Application. For detailed discussion refer to the guidelines on how to use the model (Appendix 8).

#### Component 1: Focus (Objectives of the model)

An instructional model designed to enhance the critical thinking skills, particularly the RED-recognizing assumptions, evaluating arguments, and drawing conclusions, of the undergraduate students through the combination of different tools, such as dialectic style, presentation, business case analysis, and social networking.

#### Component 2: Syntax (Instructional Process)

The core of this model is the syntax. It consists of five instructional steps as shown in the figure below:

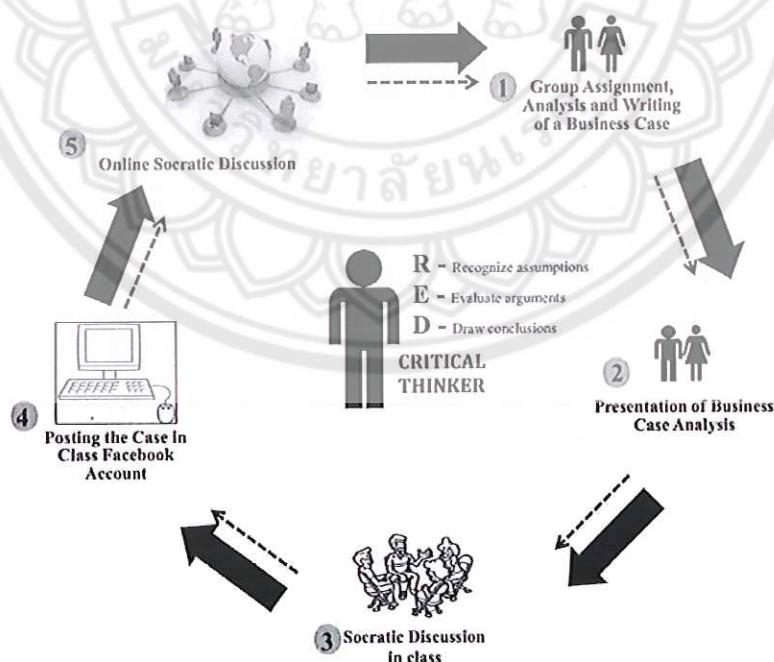


Figure 14 The Syntax (Instructional Process) of the BSMT Model



### **Step 1: Group Assignment, Analysis and Writing of a Business Case Study**

The group assignment is done in the first meeting of class by the instructor, and the case analysis and writing of the business case study are done by the students before coming to class. This step is further subdivided into different activities, namely,

1. Students are grouped into three to four people at the first class meeting by the instructor. Students are free to choose who will be in their group.

2. The cases are assigned to each group by the instructor. There is a total of ten cases for ten weeks. The presentations consist of one case study per week for a total of ten weeks. Cases are limited only to the list provided by the instructor in class.

3. The date of the case presentation is assigned and announced by the instructor at the first class meeting.

4. The group starts analyzing the case assigned before coming to class. The case analysis is written according to the prescribed format provided by the teacher.

#### **Procedure of the Business Case Analysis**

In step 2 of the syntax, it is important to understand how the students will analyze the case. In writing the business case analysis, the steps below were complied with. All the steps involved seeking to enhance the critical thinking skill of the students. The case study was used as an integral tool/activity that provides the support system in enhancing the critical thinking skill. Business case analysis involves the following steps:

1. Case assignment to a group of four students
2. Identify the case objective/s
3. Identify the problem/s
4. State the facts and issues of the case including the facts of the case, characters, incidents, and other important facts.
5. Identify alternative courses of action
6. Discussion of the alternative courses of action
7. Conclusion and recommendation

The student can choose to consult with the instructor during the case analysis stage.

### **Step 2: Presentation of the Business Case Analysis**

During the presentation of the case, students are required to comply with the following:

1. Students prepare a PowerPoint presentation.
2. The presenters provide a hard copy of the case analysis to the instructor.
3. Those who are not presenting pay close attention to the presentation.
4. The first part of the presentation is the facts of the case: nature of the case, character, events/incidents, and other important facts.
5. Discuss issues and problems.
6. Present an alternative course of action.
7. Answer the problems.
8. State the conclusion.

### **Step 3: Socratic Discussion in Class**

After the presentation, the Socratic discussion begins in class. Anyone in class can begin by asking a question. The presenters or anyone in class can answer and/or give follow-up questions. The instructor has a class card for each student where the title of the case and the week number was written for recording students' participation in class, emphasizing the question and/or answer of the participant. The instructor constantly monitors and asks probing questions to students, but does not give the answer.

During this stage, the following are the sub-stages/activities:

1. The instructor/student asks probing questions.
2. The presenter/student/instructor asks more probing questions. There is no limit to the questions. No answer is given except for some factual questions.
3. The members of the class evaluate the questions and provide more arguments and probing questions.
4. The instructor concludes the discussion. The instructor does not answer the question posed by the teacher or student.

### **Step 4: Posting the Case in the Facebook Account of the Class**

After the case presentation and class discussion, the instructor posts the case analysis to the Facebook account named "Blended Socratic Method of Teaching."



It must be noted that all the students are required to be in the Facebook account created specifically for the class.

### **Step 5: Facebook Socratic Discussion**

**Facebook Socratic Discussion:** After the case presentation and class discussion, the instructor posts the case analysis to the Facebook account named “Blended Socratic Method of Teaching.” It involves the following activities:

It involves the following sub-steps/activities:

1. Students are instructed to post their questions and/or answers. The instructor continuously monitors and asks probing questions of students but does not give answers.
2. The instructor/student asks probing questions.
3. The presenter/student/instructor asks more probing questions. There is no limit to the questions. No answer is given except for some factual questions.
4. The members of the class evaluate the questions and provide more arguments and probing questions.
5. The instructor concludes the discussion. The instructor does not answer the question posted by the teacher or student.

There is no specific period of time to finish the discussion for each case. Students can go back to the previous case to post comments/answers even after a new case has been posted.

### **Instructor’s Feedback**

An essential part of the instructional process is the instructor’s feedback. The instructor acts as the facilitator and joins the discussion. The instructor asks questions which help in generating more inquiries for the discussion until reaching the answers to the questions. The instructor maintains the status as a “guide on the side.”

### **Component 3: Principles of Reaction (Teacher’s reaction to students’ responses)**

There is an intellectual and confrontational climate probing students thinking through questions. There is “productive discomfort” which shows the urgency of asking/answering questions on the part of the students. To show this, the teacher has a class card monitoring the participation of each member.

The Socratic teacher maintains a dialectic style and keeps the discussion focused. Every opinion in class is respected and every student is treated with respect considering every idea and opinion presented. This is maintained both in class and during the Facebook discussion.

#### **Component 4: The Social System (Activities)**

A collaborative structure between instructor and students is established in class, where the Socratic teacher is considered as a 'guide on the side.' The Socratic teacher in short is a 'guide' in the learning process.

Activities involve a learner-centered approach, including group case analysis, case presentation in class, Socratic discussion in class, and Socratic discussion on Facebook.

#### **Component 5: The Support System (Teaching Materials)**

Teaching material includes ten business case studies which are based on real business situations intended to acquaint students with existing issues in business. This model nurtures the critical thinking skills of students by RED-recognizing assumptions, evaluating arguments, and drawing conclusions.

The Facebook account named 'Blended Socratic Method of Teaching' was created specifically for the class to realize the objectives of the instructional model.

A 9-10 page case study relating to the course Ethics and Corporate Social Responsibility (CSR) was assigned to students in groups. There are 10 business case studies, one for each week. The case studies are as follows:

Week 1 – The Coca-Cola Company Struggles with Ethical Crises

Week 2 – Firestone: A Reputation Blowout

Week 3 – Nike: From Sweatshops to Leadership in Employment Practices

Week 4 – New Belgium Brewing: Ethical and Environmental Responsibility

Week 5 – Starbucks' Mission: Responsibility and Growth

Week 6 – Sunbeam Corporation: "Chainsaw AI" and Greed

Week 7 – The Fall of Enron: A Stakeholder Failure

Week 8 – Microsoft: Antitrust Battles

Week 9 – Arthur Andersen: Questionable Accounting Practice

Week 10 – Wal-Mart: The Challenge of Managing Relationships with Stakeholders



The cases mentioned are all related to the learning objectives and enhancing the critical thinking skills of undergraduate business students.

### **Component 6: Application**

This instructional model is applicable to what the students have learnt and to a real work setting and to new situations, developing a deeper understanding of the circumstances they are in. The evaluation tools for evaluating the critical thinking test of undergraduate business students consisted of an achievement test administered after completion of the instruction.

### **B: Expert Validation of the BSMT Model**

Having presented the BSMT model, this section presents the experts' evaluation on the appropriateness of the BSMT model (Table 11) to enhance the critical thinking skills of undergraduate business students as well as the appropriateness of the guidelines in using the model and the lesson plan (Table 12).

**Table 10 Expert Evaluation of the Blended Socratic Method of Teaching (BSMT) Model**

### **Part 1: Appropriateness of the BSMT Model in the Enhancement of the Critical Thinking Skills of Undergraduate Business Students**

Items	n = 5		Level of Appropriateness
	$\bar{x}$	S.D.	
1. Overview of the BSMT Model			
1.1 The clarity in elaborating or explaining the overview of developing the instructional model.	4.80	0.45	Highly Appropriate
1.2 The instructional model stated the statement of necessity of enhancing the critical thinking skill of undergraduate business students.	5.00	0.00	Highly Appropriate

Table 10 (cont.)

Items	n = 5		Level of Appropriateness
	$\bar{x}$	S.D.	
1.3 The background and rationale why the model is to be developed.	5.00	0.00	Highly Appropriate
1.4 The usage of language in the composition of the overview of the instructional model is consistent, so that one can understand clearly the overview and focus of the model.	4.80	0.45	Highly Appropriate
<b>2. Background Concept in Developing the BSMT Model</b>			
2.1 The clarity in explaining the background concept used in developing the instructional model.	5.00	0.00	Highly Appropriate
2.2 The application of the concept in developing the instructional model.	4.80	0.45	Highly Appropriate
2.3 The usage of language in explaining the concept is consistent and clear.	4.80	0.45	Highly Appropriate
<b>3. Principles of BSMT Model</b>			
3.1 The principles are clear and show the focus of the instructional model.	4.80	0.45	Highly Appropriate
3.2 The focus of the instructional model can be the framework for identifying other components.	4.80	0.45	Highly Appropriate
3.3 The principles of the model are reasonable.	5.00	0.00	Highly Appropriate
3.4 The usage of language and order of the principles are consistent and easy to understand.	4.80	0.45	Highly Appropriate



Table 10 (cont.)

Items	n = 5		Level of Appropriateness
	$\bar{x}$	S.D.	
3.5 The principle of the model is in accordance with the social context.	5.00	0.00	Highly Appropriate
<b>4. Objectives</b>			
4.1 The statement of the capability of being a business student is clear.	5.00	0.00	Highly Appropriate
4.2 The purpose of the instructional model is important and critical to business students' profession in the future.	5.00	0.00	Highly Appropriate
4.3 The instructional model is practically applicable.	4.80	0.45	Highly Appropriate
<b>5. Content</b>			
5.1 The contents cover the areas that are needed for the instructional model.	4.80	0.45	Highly Appropriate
5.2 The order of the content is sequential.	4.80	0.45	Highly Appropriate
5.3 It is appropriate and useful for students.	5.00	0.00	Highly Appropriate
<b>6. Learning and Teaching Process</b>			
6.1 The clarity of the learning and teaching process embodied by BSMT model.	4.80	0.45	Highly Appropriate
6.2 The learning and teaching process is practically applicable.	4.80	0.45	Highly Appropriate
6.3 The learning and studying activities are in appropriate order.	5.00	0.00	Highly Appropriate
6.4 Time or class duration is appropriate.	5.00	0.00	Highly Appropriate

Table 10 (cont.)

Items	n = 5		Level of Appropriateness
	$\bar{x}$	S.D.	
6.5 The instructional model is appropriate for business students.	4.80	0.45	Highly Appropriate
<b>7. Measurement and Evaluation</b>			
7.1 The appropriateness of the criteria for evaluation.	4.80	0.45	Highly Appropriate
7.2 The measurement criteria are useful and applicable.	4.80	0.45	Highly Appropriate
7.3 They cover the objectives of the instructional model.	4.80	0.45	Highly Appropriate
<b>Part 2: Conformity of the Components of the BSMT Model</b>			
<b>1. Overview of the BSMT Model</b>			
1. The conformity of the principles and objectives of the instructional model.	4.80	0.45	Highly Appropriate
2. The conformity of the principles and the content of the model.	4.80	0.45	Highly Appropriate
3. The conformity of the principles and the learning process of the model.	4.80	0.45	Highly Appropriate
4. The conformity of the principles and the measurement and evaluation of the model.	4.60	0.54	Highly Appropriate
5. The conformity of the objectives and content of the model.	4.80	0.45	Highly Appropriate
6. The conformity of the objectives and the teaching and learning process of the model.	4.80	0.45	Highly Appropriate
7. The conformity of the objectives and the measurement and evaluation of the model.	4.60	0.54	Highly Appropriate



Table 10 (cont.)

Items	n = 5		Level of Appropriateness
	$\bar{x}$	S.D.	
8. The conformity of the content and the learning and teaching process.	4.80	0.45	Highly Appropriate
9. The conformity of the content and the measurement and evaluation of the model.	4.60	0.54	Highly Appropriate
10. The conformity of the learning and teaching process and the measurement and evaluation of the model.	4.60	0.54	Highly Appropriate

Table 10 presents the experts' evaluation of the appropriateness of the Blended Socratic Method of Teaching (BSMT) model in the enhancement of the critical thinking skills of undergraduate business students on the following aspects: Part 1: Overview of the BSMT model, Background Concept in Developing the Model, Principles of BSMT Model, Objectives, Content, Learning and Teaching Process, and Measurement and Evaluation. Part 2 assesses the conformity of the components of the model. The five experts rated the appropriateness of the BSMT model as "highly appropriate" in all items.

The experts in the following items rated the model "highly appropriate" ( $\bar{x} = 5.00$  and S.D. = 0.00): the instructional model stated the statement of necessity of enhancing the critical thinking skill of undergraduate business students; the background and rationale why the model is to be developed; the clarity in explaining the background concept used in developing the instructional model; the principles of the model are reasonable; the principle of the model is in accordance with the social context; the statement of the capability of being a business student is clear; the purpose of the instructional model is important and critical to business students' profession in the future; it is appropriate and useful for students; the learning and studying activities are in appropriate order; and the time or class duration is appropriate.

### Expert Comments

#### Appropriateness of the BSMT Model in the Enhancement of Critical Thinking

The experts commented on the appropriateness of the BSMT model. When it comes to the components in the development of the model as well as the related literature, the experts commented that,

“Good organization and thorough review of related literature.”

“Well documentary research and succinctly conceptualized in details and very easy to administer, leading to the construction and evaluation of the proposed model in authentic educational settings.”

Other experts commented that the model is a breakthrough and that teaching professionals should be aware of it.

“From my experience of teaching over 42 years, I find this method to be the wave of the future and all teaching professionals should be made aware of this method.”

“In my opinion, this is an excellent and well organized instructional model.”

In the second part of the questionnaire, the expert expressed his positive feedback about the model.

“Clear, very precise and informative. Conforms to all expectations and principles.”

“Well done!”

**Table 11 Expert Evaluation of the Guidelines on How to Use the Blended Socratic Method of Teaching (BSMT) Model**

#### Part 1: How to use the BSMT Model

Items	n = 5		Level of Appropriateness
	$\bar{x}$	S.D.	
1. The details on how to use the model is clear to apply it effectively.	4.80	0.45	Highly Appropriate



Table 11 (cont.)

Items	n = 5		Level of Appropriateness
	$\bar{x}$	S.D.	
2. The procedure in studying the documents before teaching shows the expected result.	5.00	0.00	Highly Appropriate
3. The details in the instruction include the information about the preparation of the teaching materials necessary for conducting activities.	5.00	0.00	Highly Appropriate
4. The overview of the measurement and evaluation is clear.	4.60	0.54	Highly Appropriate
5. The summary of the requirements to be prepared in the measurement and evaluation is clear and easy to prepare.	4.60	0.54	Highly Appropriate
6. The statement about grading is clear and easy to understand.	4.80	0.45	Highly Appropriate
7. The suggestions in terms of student and teacher's role in teaching and learning are clear and applicable.	4.80	0.45	Highly Appropriate
<b>Part 2: Evaluation of the Appropriateness of the Lesson Plan</b>			
<b>1. Determinants (Overview) of the Components of the Lesson Plan</b>			
1.1 The components of the teaching plan are comprehensive and cover the necessary requirements.	5.00	0.00	Highly Appropriate
1.2 The order / sequence of the components of the lesson plan are appropriate and easy to understand.	4.60	0.54	Highly Appropriate
1.3 There is conformity among the components of the teaching plan.	4.60	0.54	Highly Appropriate

Table 11 (cont.)

Items	n = 5		Level of Appropriateness
	$\bar{x}$	S.D.	
1.4 The topic of the lesson plan is appropriate.	5.00	0.00	Highly Appropriate
1.5 The language use in the lesson is clear and easy to understand.	5.00	0.00	Highly Appropriate
<b>Components of the Lesson Plan</b>			
<b>1. Important Concepts</b>			
1.1 The concepts used are appropriate and reflects the significance of the lesson plan.	4.80	0.45	Highly Appropriate
<b>2. Objectives</b>			
2.1 The objectives of the lesson plan conform to the objectives of the instructional model.	4.80	0.45	Highly Appropriate
2.2 The objectives are clear and reflect the learning outcome expected to occur to the students.	4.80	0.45	Highly Appropriate
2.3 The objectives are practically applicable.	4.80	0.45	Highly Appropriate
<b>3. Content</b>			
3.1 The content conforms to the objectives of the instructional model and can lead to the achievement of the objectives set forth.	4.80	0.45	Highly Appropriate
3.2 The content is appropriate for the students / learners.	5.00	0.00	Highly Appropriate
<b>4. Learning and Teaching Activities</b>			
4.1 The steps in conducting activities are in appropriate order.	5.00	0.00	Highly Appropriate



Table 11 (cont.)

Items	n = 5		Level of Appropriateness
	$\bar{x}$	S.D.	
4.2 The determinants of each activity in each step are clear and easy to understand.	4.60	0.54	Highly Appropriate
4.3 During the activities, students are given the opportunity to participate.	5.00	0.00	Highly Appropriate
4.4 The content conforms to the teaching and learning process of the model.	4.80	0.45	Highly Appropriate
4.5 The period in conducting the activity is appropriate.	5.00	0.00	Highly Appropriate
<b>5. Measurement and Evaluation</b>			
5.1 The measurement and evaluation conform to the objectives of the BSMT model.	4.80	0.45	Highly Appropriate
5.2 The measurement and evaluation are in accordance with the lesson plan.	4.80	0.45	Highly Appropriate
5.3 The instructional model is appropriate with the skill (critical thinking) of students to be measured.	4.80	0.45	Highly Appropriate
5.4 The students can participate/perform effectively what is required in the measurement and evaluation.	4.80	0.45	Highly Appropriate
5.5 The preparation of the instrument to be used in measurement and evaluation is clear and easy to use.	4.80	0.45	Highly Appropriate

Table 11 presents the experts' evaluation of the guidelines on how to use the Blended Socratic Method of Teaching (BSMT) model to enhance the critical thinking skills of undergraduate business students. On the first and second parts, the experts

rated the guidelines “highly appropriate” in all aspects. The experts rated the guidelines “highly appropriate” ( $\bar{x} = 5.00$  and  $S.D. = 0.00$ ) on the following: the procedure in studying the documents before teaching shows the expected result; the details in the instruction include the information about the preparation of the teaching materials necessary for conducting activities; the content is appropriate for the students / learners; the steps in conducting activities are in appropriate order; during the activities, students are given the opportunity to participate; and the period in conducting the activity is appropriate.

In Part 2, the experts likewise rated “highly appropriate” ( $\bar{x} = 5.00$  and  $S.D. = 0.00$ ) the appropriateness of the lesson plan in the following: the components of the lesson plan are comprehensive and cover the necessary requirements; the topic of the lesson plan is appropriate; and the language use in the lesson plan is clear and easy to understand.

#### **Expert Comments on the Guidelines on How to Use the BSMT Model**

The experts commented positively on the guidelines on how to use the BSMT model. They also expressed that the model is highly recommended. The experts' comments are below:

“The model is clear, complete, well-planned, and easy to understand.”

“Agree completely! Very good and well presented. Highly recommended.”

#### **Phase III: Implementation and determination of the effectiveness of the instructional model.**

Phase III is the implementation and determination of the effectiveness of the BSMT Model. The experimental group where the instructional model was used consisted of 40 third year students, majoring in Human Resource Management at Naresuan University International College in the first semester of academic year 2014. The results will be presented in two parts: A. The Implementation of the Model, and B. The Determination of the Effectiveness of the Model.



### A. The Implementation of the Model

The research instrument used was the Blended Socratic Method of Teaching (BSMT) model to enhance the critical thinking skills of undergraduate business students. The model was embedded in the course Ethics and Corporate Social Responsibility. Three parts of the results will be presented: lesson plan, business case analysis, and Facebook account.

#### 1. Lesson Plan

An example of a lesson plan is presented below. The lesson plan consists of five parts, namely, overview, objectives, content, activities, teaching materials, and evaluation.

Lesson Plan	
Week: 1	
Topic: Introduction to Business Ethics	Duration: 3 hours
<b>1. Overview</b> <p>This lesson plan is designed to teach the course content and integrate the instruction of critical thinking into undergraduate business students. In this lesson, the student is expected to understand what business ethics is and its importance. Parallel to the content is the use of a case closely related to the topic. Recognizing assumptions, evaluating arguments and drawing conclusions are the critical thinking skills that the students will enhance by the completion of the lesson.</p>	
<b>2. Objectives</b> <p>On the completion of the lesson, the student is expected to:</p> <p>(Knowledge)</p> <ol style="list-style-type: none"> <li>1. Understand business ethics and its importance in organizations.</li> <li>2. Examine the historical foundations and evolution of business ethics.</li> <li>3. Identify ethical value systems that support business performance.</li> </ol> <p>(Process)</p> <ol style="list-style-type: none"> <li>4. Analyze and gain insight into the extent of ethical misconduct in the workplace and the pressures of unethical behavior.</li> <li>5. Separate fact from opinion or fiction.</li> </ol>	

6. Analyze information objectively and accurately and question the evidence.

7. Decide a course of action.

(Attitude)

8. Participate actively in creating a coherent method of solving problems by reorganizing the elements of the content of the unit and the case presented through generating and planning.

### **3. Content**

The lesson consists of the following parts:

1. What is business ethics?
2. Why study business ethics?
3. The development of business ethics
4. Developing an organizational and global ethical culture
5. The benefits of business ethics

### **4. Activities**

Lecture-discussion – A 30-minute lecture-discussion of the previously assigned topic (Introduction of Business Ethics). This is simply an introduction of the topic.

Using the Blended Socratic Method of Teaching (BSMT) Model

Step 1: Group assignment, Analysis and Writing of a Business Case Analysis

Pre-grouping of class and pre-assignment of cases shall take place at the first class meeting. Analysis and writing of the case shall take place outside and before the date assigned for the presentation. The case analysis will be written according to the prescribed format.

Step 2: Presentation of Business Case Analysis

Case Presentation – A group of 3-4 students will present a previously assigned case (“The Coca-Cola Company Struggles with Ethical Crisis”). The group shall prepare a PowerPoint presentation and a hard copy of the case analysis prior to the date of the presentation and a hardcopy shall be given to the instructor on the day of the presentation. The presentation will take about 20-30 minutes.

Step 3: Socratic Discussion in Class

For this step, the instructor has a class card for each student where the title of the case and the week number are written. The student will be called by random using the card. Then the questioning starts (Sample Socratic Questions, Appendix 12).



During this stage, the following are the sub-steps/activities:

1. The instructor/student asks probing questions.
2. The presenter/student /instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.
3. The members of the class evaluate the questions and provide more arguments and probing questions.
4. The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.

The Socratic discussion in class shall last for 90 minutes or more.

#### Step 4: Posting the Case in the Facebook Account of the Class

After the class Socratic discussion, the instructor will post the case analysis to the Facebook account named "Blended Socratic Method of Teaching." It must be noted that all the students were previously required to be a "friend" in the Facebook account created specifically for the class before the online Socratic discussion commences.

#### Step 5: Online Socratic Discussion

The online Socratic discussion (Sample Socratic Questions, Appendix 12) commences on the same day the class Socratic discussion ended.

It involves the following sub-steps/activities:

1. The instructor will post a summarized version of the case on the Facebook account.
2. Students' will be instructed to post their questions and/or answers. The instructor will continuously monitor and ask probing questions of students but will not give answers.
3. The instructor/student asks probing questions.
4. The presenter/student/instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.
5. The members of the class evaluate the questions and provide more arguments and probing questions.
6. The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.

There is no specific period of time to finish the discussion for each case. However, an hour is allotted for the online Socratic discussion. Students can go back to the previous case to post comments/answer even a new case has been posted.

### **5. Teaching Materials**

1. Textbook
2. The case titled: “The Coca-Cola Company Struggles with Ethical Crisis” (please see attachment) - In brief, this is a 9-page case about the different ethical issues faced by then the most popular brand in the world and how the company struggled to save its reputation. The case is very relevant to the importance of studying business ethics.
3. Class Facebook account
4. Teaching media in class (computer, overhead projector and microphone)

### **6. Evaluation**

1. A quiz after the class and online Socratic discussion of each case
2. Class observation of students’ participation in class using the students’ class card.
3. Class monitoring of students’ participation in the Facebook discussion using the students’ class card.

## **2. Business Case Studies**

The business case studies (Appendix 10) were selected according to the following criteria: the cases are depicting real-life situations, related to business field, arranged according to which company is popular or well-known to the students; and the cases provided scenarios that will stimulate students to think critically.

Week 1 – The Coca-Cola Company Struggles with Ethical Crises

Week 2 – Firestone: A Reputation Blowout

Week 3 – Nike: From Sweatshops to Leadership in Employment Practices

Week 4 – New Belgium Brewing: Ethical and Environmental Responsibility

Week 5 – Starbucks’ Mission: Responsibility and Growth

Week 6 – Sunbeam Corporation: “Chainsaw AI” and Greed

Week 7 – The Fall of Enron: A Stakeholder Failure



Week 8 – Microsoft: Antitrust Battles

Week 9 – Arthur Andersen: Questionable Accounting Practice

Week 10 – Wal-Mart: The Challenge of Managing Relationships with Stakeholders

### 3. Facebook Account

The Facebook discussion revealed the following results:

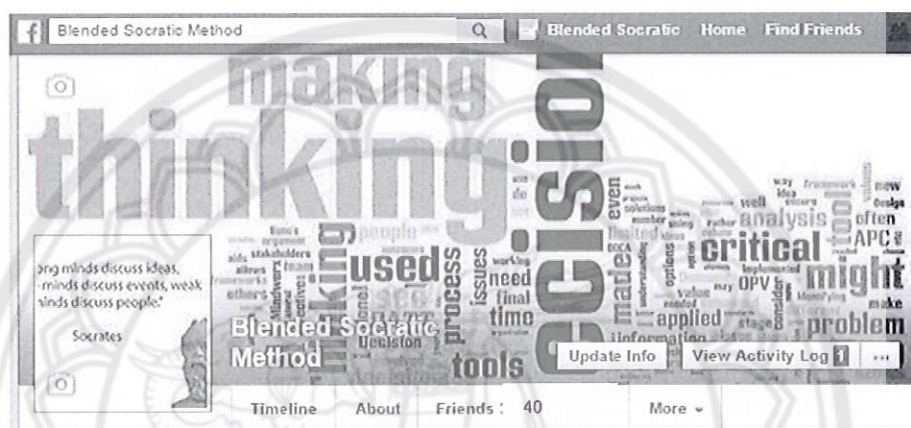


Figure 15 Screen Shot of the Class Facebook Account

Source: www.google.com

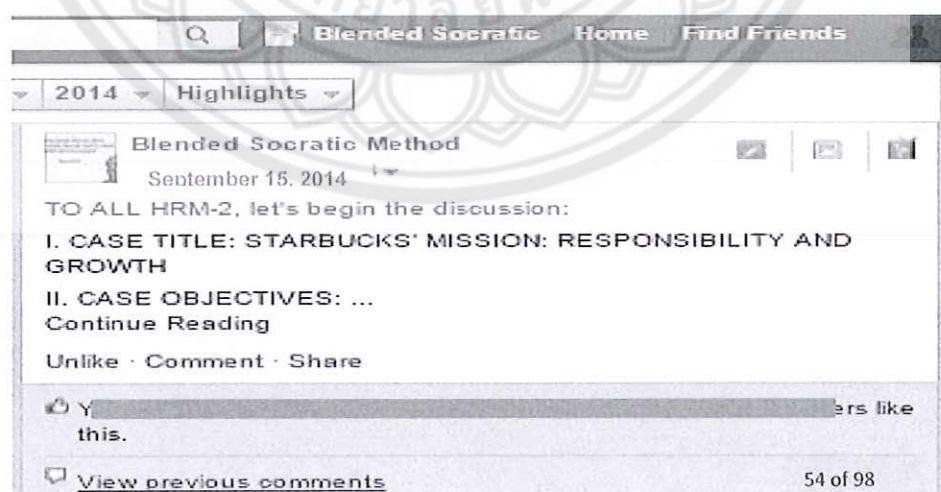



Figure 16 Excerpt of Socratic Facebook Discussion 1


**Blended Socratic Method**

September 15, 2014

TO ALL HRM-2, let's begin the discussion:


I. CASE TITLE: STARBUCKS' MISSION: RESPONSIBILITY AND GROWTH

II. CASE OBJECTIVES: ...

Continue Reading

Like
Comment
Share


Y... and 10 others like this.



Blended Socratic Method These are the three problems in this case:III.  
PROBLEMS:...


- 1) Why do you think Starbucks has been so concerned with social responsibility in its overall corporate strategy?
- 2) Is Starbucks unique in being able to promote a high level of benefits to it... See More

September 15, 2014 at 12:27pm Edited · Like · 2




3. Ans : i think. First thing that make Starbucks has grown rapidly because of the ethical and socially responsible activities. Starbucks focus on employment to made a good quality they spent money for develop own employee and help farmers who are growing and supplying coffee for good quality to Starbucks , so they supply their employment to make a good quality that mean the product also will be good quality.

September 15, 2014 at 4:08pm Unlike · 2



Starbucks has social responsibility , good product and Then starbucks continually works to grow their by diversifying Ex.The Hear Music platform includes media bars in stores customer can download the music.They also provide wireless internet in store and Have <http://www.starbucks.com/> for promote promotion and tell informaiotn about starbucks .




**Starbucks Coffee Company**

Since 1971, Starbucks Coffee Company has been committed to ethically sourcing and roasting the highest...

STARBUCKS.COM

September 15, 2014 at 6:42pm Edited · Unlike · 2 · Remove Preview



Starbucks has grown rapidly because of the ethical and socially responsible activities. Starbucks emphasize in all facets of our business and maintaining uncompromising principles. Example Environmental Mission is that "Starbucks is committed to a role... See More

September 15, 2014 at 6:42pm Unlike · 2

**Figure 17 Excerpt of Socratic Facebook Discussion 2**



In the Facebook discussion, the students' questions and/or answers are quoted verbatim, including punctuations and spelling. Some excerpts of the Facebook discussion are in Appendix 14. The results are as follows:

#### **Socratic Teacher's Notable Observation**

1. The minimum days of discussion lasted for 10 days for each case. The lowest numbers of days that the students discussed for a case was for 3 days, and the longest days of discussion was for 21 days or 3 weeks. The traditional classroom discussion is only for 3 hours.

2. The highest number of questions and answers altogether reached 98 and the lowest was 67.

3. The students asked and/or answered questions 24/7. The students discussed 24 hours a day from Monday to Sunday, including holidays. Students were even discussing at 2:00 in the morning. The instructor as well gave her feedback round the clock.

#### **Student-Interlocutor Notable Participation**

1. The students voluntarily and willingly asked and/or answered questions, and even answered or give additional answers on behalf of their classmates e.g. "I wanna answer about what teacher asked to (student name). I think other coffee shops and companies should follow starbucks good culture to focus more on employee than product or profit of companies..."

2. The students asked clarificatory questions both to the instructors and their classmates, e.g. Q: "What are the ethical and legal in this case"?; Clarificatory question: "Please clarify your question". "Excuse me, Can I ask the question some problem I don't know".

3. Students had self-initiative to start the discussion which never happened in a traditional classroom discussion, e.g. "Let's discuss about fall of Enron"; "What legal and ethical issues in Microsoft case? What do Microsoft solve with that? Let's begin."

4. The students did some research related to the topic and post the link in the Facebook account, e.g., "I have more information of starbucks (link)."

5. The students could answer at a minimum three full sentences, which does not happen in traditional classroom discussion, e.g. "I think not decision yet. But I thought, Starbucks has a reputation built around responsible, ethical business practices and building communities in areas where Starbucks do business. From top down, they're committed to enhancing them ethical performance through strategic relationships with global, regional and domestic suppliers. That's cause reputation".

6. The passive students, those who do not normally speak in class became active students in the discussion.

7. The students could express their agreement or disagreement with their classmates or the instructors, and offered other ideas or opinion. "I totally agree with... Starbubuckization means going worldwide, selling coffees through different branches in different country..."; "I have a different opinion".

8. The students could confidently answer the question posted by the instructor, e.g., Q: "Do you think an ethics compliance program is important to organizations?" Students answer: "Definitely yes, an Ethics Compliance Program is important for an organization because ajarn already mention that the PETCO's ethics and compliance program served as a guide for employees on how they will conduct themselves. Likewise, there was a good implementation and evaluation of the program."

9. The students could ask questions resembling that they critically analyzed the case, e.g., "How do you think about the accounting fraud in confidence of company? Agree or disagree?"; "Why the Enron's outstanding common stock and preferred stock cancelled? How are they solving problem?"; "What lesson did you get from this case study? and "If you are one of lower labours in company and you know your boss is practicing unethical...in company...what will you do?"

10. The students showed how they critically analyzed the problems and questions presented in the case by giving logical answers based on reasons and offered solutions, e.g., "In my opinion, Starbuck has been so concerned with social responsibility because it can get good reputation for the organization as it can be useful in long-term relationship with society. This strategy also can provide the continuing growth of the organization indirectly way. Unlike other company, Starbuck



has so concerned about wellbeing of employee. As Schultz's father suffered an injury and left his unemployed, he want to build the company that provide health care for the blue collar worker. Therefore, Starbuck is an unique. As Starbuck provide health benefits to its employees and even their Part-time employees. In his point, to maintain a strong business he has to create environment that employees believe they're part of something larger than themselves. I think this strategy is effective on influencing and motivating its employees mind to do a better job. As Starbuck success in social responsible activities, it also lead to a social media marketing successful. It lead to rapidly grow of the business and it also retain continue growing."

11. The instructor gave immediate and continuous feedback to students' answers and/or questions, e.g., "I like your comment and the link you provided (student name). Thank you for that! Very nice of you posting that :). Do you think the Music Platform helps Starbucks to promote more its products?"; "Very good answer (student name), why do think Starbucks care MORE to its EMPLOYEES and secondary are the customers?"; "Very good answer (student name), thanks for that elaboration. (Student name) thanks for that additional information. Would you say that other companies should follow what Starbucks is doing?" "Very well said (student name)...thank you for the lengthy answer. I especially like the info on the current number of countries where Starbucks is operating."

#### **B. The Determination of the Effectiveness of the Model**

In the determination of the effectiveness of the model, the pre-test, post-test research was used. The data was analyzed using paired sample t-test to determine if there is a significant difference on the critical thinking skill of students before and after studying using the BSMT model.

**Table 12 Overall Comparison of the Critical Thinking Appraisal of the Experimental Group**

<b>Comparison of the Pre-test and Post-test Critical Thinking Score</b>						
	$\bar{x}$	S.D.	t	df	Sig	Level
1. Pre-test Score	13.20	3.88	12.614*	39	.000	Well Below Average
2. Post-test Score	25.17	3.18				Below Average

\* $p \leq .01$

The overall comparison of the pre-test and post-test scores shows that the post-test is higher than the pre-test score with statistical difference at 0.01 level. This means that the students enhanced their critical thinking skills. The level of the students' critical thinking enhanced from "well below average" (13.20) to "below average" (25.17) according to the percentile provided by Watson-Glaser (Appendix M).

**Table 13 Detailed Comparison of the Pre-test and Post-test Scores of the Subsections of the Critical Thinking Appraisal**

<b>Comparison of the Pre-test and Post-test Critical Thinking Score</b>						
	$\bar{x}$	S.D.	t	df	Sig	
1. Inference						
Pre-test	2.03	1.32	12.104*	39	.000	
Post-test	5.85	1.47				
2. Assumptions						
Pre-test	2.55	1.10	11.077*	39	.000	
Post-test	5.48	1.06				



Table 13 (cont.)

Comparison of the Pre-test and Post-test Critical Thinking Score	$\bar{x}$	S.D.	t	df	Sig
3. Deductions					
Pre-test	2.38	1.54	10.101*	39	.000
Post-test	5.37	1.42			
4. Interpreting information					
Pre-test	2.95	1.64	8.767*	39	.000
Post-test	5.70	1.09			
5. Analyzing arguments					
Pre-test	3.30	1.34	6.446*	39	.000
Post-test	5.78	1.16			

\* $p \leq .01$ 

Table 13 presents the detailed results of the pre and post critical thinking score of the HRM 3 in each subsections of the test. Each subsection consists of eight questions. It is evident that the BSMT model works well in the implementation stage. The table clearly shows that their critical thinking skills improved in each subsections, inferences ( $\bar{x} = 2.03$  to  $\bar{x} = 5.85$ ) followed by deductions ( $\bar{x} = 2.38$  to  $\bar{x} = 5.37$ ), assumptions ( $\bar{x} = 2.55$  to  $\bar{x} = 5.48$ ), interpreting information ( $\bar{x} = 2.95$  to  $\bar{x} = 5.70$ ), and analyzing arguments ( $\bar{x} = 3.30$  to  $\bar{x} = 5.78$ ).

**Phase IV: To evaluate the level of satisfaction of undergraduate business students towards the instructional model.**

Phase IV presents the results of the students satisfaction on the BSMT Model. The satisfaction survey is comprised of two parts, the former using the rating scales (1-5) and the latter is an open-ended question format. The test was given to the students at one time, after completion of the session using the BSMT. The questionnaire was tested for validity by three experts. Data analysis for the satisfaction survey was carried out using mean ( $\bar{x}$ ) and standard deviation (S.D.).

Likert Scale has the following equivalent: 4.50-5.00 = Strongly Satisfied; 3.50-4.49 = Satisfied; 2.50-3.49 = Moderately Satisfied; 1.50-2.49 = Fairly Satisfied; 0.00-1.49 = Poorly Satisfied. Content analysis was likewise used in interpreting the answers of students to the open-ended questions stated in the satisfaction survey.

### Part I Quantitative results of the satisfaction survey

**Table 14 Overall Students' Satisfaction on the Blended Socratic Method of Teaching (BSMT) Model**

Items	n = 40		Level of Satisfaction
	$\bar{x}$	S.D.	
1. Objectives	4.55	0.43	Strongly Satisfied
2. Instructional Process (Syntax)	4.53	0.32	Strongly Satisfied
3. Content	4.58	0.45	Strongly Satisfied
4. Teaching Materials (Support system)	4.57	0.37	Strongly Satisfied
5. Teacher-Student Interaction or Rapport (Principles of Reaction)	4.59	0.42	Strongly Satisfied
6. The Social System	4.66	0.39	Strongly Satisfied
7. Measurement and Evaluation	4.57	0.44	Strongly Satisfied
8. Impact on Students, Student Self-Rated Accomplishments	4.54	0.39	Strongly Satisfied
9. Overall Ratings	4.50	0.48	Strongly Satisfied



Table 14 presents the students' overall rating on the BSMT model. Of the eight categories rated, students gave the highest rating to "The social system (activities)" ( $\bar{x} = 4.66$  and S.D. 0.39). The social system includes the collaborative structure of teaching between students and the instructor, the instructor being a "guide on the side", and continuous feedback provided by the instructor which are all intended to help students to think critically. The students rated the second highest "Teacher-Student interaction or Rapport (Principles of Reaction)" ( $\bar{x} = 4.59$  and S.D. 0.42). It shows that students can enhance their critical thinking in an environment where there is respect and good relationship between the instructor and the teacher. The fact that students were challenged by probing questions likewise contributed to enhancing students' critical thinking.

The third highest was "Content" ( $\bar{x} = 4.58$  and S.D. 0.45), fourth, "Teaching Materials (Support System)" ( $\bar{x} = 4.57$  and S.D. 0.37) and "Measurement and Evaluation" ( $\bar{x} = 4.57$  and S.D. 0.44), fifth, "Objectives (Focus)" ( $\bar{x} = 4.55$  and S.D. 0.43), and sixth, "Impact on Students, Student Self-Rated Accomplishments" ( $\bar{x} = 4.54$  and S.D. 0.39).

**Table 15 Students' Satisfaction on the Blended Socratic Method of Teaching (BSMT) Model**

Items	n = 40		Level of Satisfaction
	$\bar{x}$	S.D.	
1. Objectives			
1.1 The objectives (focus) of the instructional model are clear.	4.70	0.46	Strongly Satisfied
1.2 The objectives (focus) of the model enhance critical thinking.	4.55	0.50	Strongly Satisfied
1.3 The students learn how to recognize assumptions	4.50	0.66	Strongly Satisfied
1.4 The students learn how to evaluate arguments	4.53	0.59	Strongly Satisfied

Table 15 (cont.)

Items	n = 40		Level of Satisfaction
	$\bar{x}$	S.D.	
1.5 The students learn how to draw conclusion	4.43	0.65	Strongly Satisfied
<b>2. Instructional Process (Syntax)</b>			
2.1 The group assignment of case analysis enhances students' critical thinking skill.	4.56	0.55	Strongly Satisfied
2.2 The writing of case analysis enhances students' critical thinking skill.	4.60	0.51	Strongly Satisfied
2.3 The class presentation of the case study enhances students' critical thinking skill.	4.65	0.55	Strongly Satisfied
2.4 The Socratic discussion of the case study in class enhances students' critical thinking skill.	4.62	0.51	Strongly Satisfied
2.5 The Socratic discussion of the case study in Facebook enhances students' critical thinking.	4.42	0.57	Strongly Satisfied
2.6 The instructional process is an orderly manner.	4.29	0.61	Satisfied
<b>3. Content</b>			
3.1 The content is presented in an orderly manner.	4.53	0.59	Strongly Satisfied
3.2 The content focuses on enhancing students' critical thinking.	4.58	0.59	Strongly Satisfied
3.3 The content is applicable for students' future career (business field).	4.62	0.54	Strongly Satisfied
<b>4. Teaching Materials (Support system)</b>			
4.1 The case studies help in enhancing students' critical thinking.	4.60	0.55	Strongly Satisfied
4.2 The case studies are clear.	4.47	0.70	Strongly Satisfied



Table 15 (cont.)

Items	n = 40		Level of Satisfaction
	$\bar{x}$	S.D.	
4.3 The case studies are applicable to students' future career.	4.50	0.63	Strongly Satisfied
4.4 The PowerPoint presentations are clear and easy to understand.	4.67	0.54	Strongly Satisfied
4.5 The class Facebook account helps students to study anytime and anywhere.	4.60	0.52	Strongly Satisfied
4.6 The Facebook account is convenient to use.	4.57	0.64	Strongly Satisfied
<b>5. Teacher-Student Interaction or Rapport (Principles of Reaction)</b>			
5.1 The intellectual and confrontational climate through probing questions helps students to think more.	4.59	0.55	Strongly Satisfied
5.2 The dialectic style (dialogue) enhances students' critical thinking.	4.52	0.50	Strongly Satisfied
5.3 The environment of respect during the discussion stimulates students to think critically.	4.65	0.55	Strongly Satisfied
<b>6. The Social System</b>			
6.1 The collaborative structure of teaching between students and instructor stimulates students to think more.	4.72	0.45	Strongly Satisfied
6.2 The role of the instructor as a "guide on the side" helps students to think critically.	4.65	0.53	Strongly Satisfied
6.3 The continuous feedback provided by the instructor stimulates students to think more.	4.60	0.49	Strongly Satisfied
<b>7. Measurement and Evaluation</b>			
7.1 The criteria for evaluation are appropriate.	4.58	0.50	Strongly Satisfied

Table 15 (cont.)

Items	n = 40		Level of Satisfaction
	$\bar{x}$	S.D.	
7.2 The requirements of the course are measured appropriately.	4.55	0.59	Strongly Satisfied
<b>8. Impact on Students, Student Self-Rated Accomplishments</b>			
8.1 I learned a great deal in this course.	4.60	0.55	Strongly Satisfied
8.2 This course generally fulfilled my goals.	4.45	0.57	Strongly Satisfied
8.3 The instructional model used in this course generally enhances my critical thinking skill (recognizing assumptions, evaluating arguments, deducting conclusions).	4.58	0.50	Strongly Satisfied
<b>9. Overall Ratings</b>			
9.1 The instructional model is effective.	4.58	0.50	Strongly Satisfied
9.2 The course is highly valuable.	4.50	0.55	Strongly Satisfied
9.3 The overall quality of face-to-face and Facebook discussion was excellent.	4.42	0.67	Strongly Satisfied

Table 15 shows the level of satisfaction of HRM students towards the BSMT model. There are eight categories rated by the students. The first category of the satisfaction survey is the learning objectives, which the students rated strongly satisfied. The highest rating was "The objectives (focus) of the instructional model are clear" ( $\bar{x}$  = 4.70 and S.D. 0.46), followed by "The objectives of the model enhance critical thinking" ( $\bar{x}$  = 4.55 and S.D. 0.50). The lowest rating was "The students learn how to draw conclusion" ( $\bar{x}$  = 4.43 and S.D. 0.65).



The second category of the satisfaction survey is the model's instructional process (syntax). The highest rating was "The class presentation of the case study enhances students' critical thinking skill" ( $\bar{x} = 4.65$  and S.D. 0.55), followed by "The Socratic discussion of the case study in Facebook enhances students' critical thinking" ( $\bar{x} = 4.62$  and S.D. 0.51). The lowest rating was "The instructional process is an orderly manner" ( $\bar{x} = 4.29$  and S.D. 0.61), which means that the students agree. The students strongly agree on the rest of the items in category two.

The third category was the content. On the three items, students rated them "strongly satisfied." The highest rating was "The content is applicable for students' future career (business field)" ( $\bar{x} = 4.62$  and S.D. 0.54), followed by "The content focuses on enhancing students' critical thinking" ( $\bar{x} = 4.58$  and S.D. 0.59), and finally, "The content is presented in an orderly manner" ( $\bar{x} = 4.53$  and S.D. 0.59). The results show that the students appreciate the importance of content presented using the BSMT model.

The fourth category of the satisfaction survey is the BSMT's teaching materials (support system). The students were strongly satisfied on the six items and rated as follows: "The PowerPoint presentations are clear and easy to understand" ( $\bar{x} = 4.67$  and S.D. 0.54), "The class Facebook account helps students to study anytime and anywhere" ( $\bar{x} = 4.60$  and S.D. 0.52), "The case studies help in enhancing students' critical thinking" ( $\bar{x} = 4.60$  and S.D. 0.55), and the lowest rating was "The case studies are clear" ( $\bar{x} = 4.47$  and S.D. 0.70).

The fifth category of the satisfaction survey is the teacher-student interaction or rapport (principles of reaction). The students rated the three items "strongly satisfied." The highest rating was "The environment of respect during the discussion stimulates students to think critically" ( $\bar{x} = 4.65$  and S.D. 0.55), followed by "The intellectual and confrontational climate through probing questions helps students to think more" ( $\bar{x} = 4.59$  and S.D. 0.55), and finally, "The dialectic style (dialogue) enhances students' critical thinking" ( $\bar{x} = 4.52$  and S.D. 0.50).

The sixth category of the satisfaction survey is the social system. The students rated the three items "strongly satisfied." The highest rating was "The collaborative structure of teaching between students and instructor stimulates students

to think more" ( $\bar{x} = 4.72$  and S.D. 0.45), followed by "The role of the instructor as a 'guide on the side' helps students to think critically" ( $\bar{x} = 4.65$  and S.D. 0.53), and finally, "The continuous feedback provided by the instructor stimulates students to think more" ( $\bar{x} = 4.60$  and S.D. 0.49).

The students rated "strongly satisfied" the measurement and evaluation in the BSMT model. The highest rating was "The criteria for evaluation are appropriate" ( $\bar{x} = 4.58$  and S.D. 0.50), and "The requirements of the course are measured appropriately" ( $\bar{x} = 4.55$  and S.D. 0.59).

The eight category of the satisfaction survey is the impact on students or the students self-rated accomplishments after participating in the class using the BSMT model. The students rated the three items "strongly satisfied." The highest rating was "I learned a great deal in this course" ( $\bar{x} = 4.60$  and S.D. 0.55), followed by "The instructional model used in this course generally enhances my critical thinking skill (recognizing assumptions, evaluating arguments, deducting conclusions)" ( $\bar{x} = 4.58$  and S.D. 0.59), and finally, "This course generally fulfill my goals" ( $\bar{x} = 4.45$  and S.D. 0.57).

The last category of the satisfaction survey is the overall ratings of the students on the BSMT model. The students were strongly satisfied on the effectiveness, value, and quality of the face-to-face and Facebook discussion. The highest rating was "The instructional model is effective" ( $\bar{x} = 4.58$  and S.D. 0.50), followed by "The course is highly valuable" ( $\bar{x} = 4.50$  and S.D. 0.55), and finally, "The overall quality of face-to-face and Facebook discussion was excellent" ( $\bar{x} = 4.42$  and S.D. 0.67).

#### **Other Comments of the Students on the BSMT Model:**

In this part of the survey, students could write anything they felt about the Blended Socratic Method of Teaching Model (BSMT Model). There were seven students who wrote comments on the survey. Here are their comments.

"Using technology will make student more interested in class." The same student said that the course helped him to set clear goals for the future and provided guidelines for success.



“This course is a fulfillment to us individually. Thank you teacher for the knowledge”!

“I sometimes have problems with cellphone, so I couldn't answer the questions of my classmates in our Facebook account”.

“We got a chance to study outside the class by using Facebook, which is more important for the student to experience real life situation”.

“The course and the teaching style used made me interested. It did not bore me. However, I want to see more pictures in the slides used in class”.

“Business ethics and CSR are very important for HR students because as a HR student we have to understand the surrounding circumstances about the work place and analyze its environment. Just theory would not make us adaptive to the work environment, thus blended learning (class and online learning) is important. I would like to suggest if the university could focus on blended learning”.

The comments above suggested that the students in general appreciated the teaching method used in class, and they were interested in the teaching method and believed that the course will be important to them in the future.

## **Part II Responses to Open-ended Questions on the Satisfaction Survey of the BSMT Model**

The Part II of the satisfaction survey was an open-ended question. There were five questions.

**What is the most important thing you have learned from attending this course?**

The answers were grouped into four areas: academic achievement, recognition of the importance of the course to future career, acquisition of critical thinking skill, and recognition of the method of teaching.

### **1. Academic Achievement**

Some students cited more than one thing that they considered important in attending this course. The top most important thing the students learned was about the course, Ethics and Corporate Social Responsibility. Based on their answers, it can be presumed that students enhanced their critical thinking. Some of the students' answers are as follows:

"I definitely learned about the course-Ethics and Corporate Social Responsibility and I enjoyed it"!

"The most important thing I have learned from attending this course was about the course-Ethics and Corporate Social Responsibility. I got much knowledge from this course and I think it is crucial in business field".

"The course taught us about the work environment and how different activities are related. Aj. Eugenia A. Boa conducted in and out of classroom activities, which are very informative and interesting. Her teaching taught me a lot and prepared me to face the real work environment. The case studies she gave me made me aware of different situation that take place in real work setting".

"I learned more about Ethics and Corporate Social Responsibility and realized that it is very important for employees. So after my graduation, I know how to deal with employees ethically and work for the company so that I won't fail my manager in the future".

In the above responses, the students emphasized that they learned how to act as ethical employees in the future and how to protect themselves and their employees and how to work in an ethical environment. These revelations can be presumed as an enhancement of students' critical thinking.

## **2. Recognition of the Importance of the Course to Future Career**

The second top most important thing they learned was the recognition of the importance and usefulness of the course to their future career – Human Resource Management. Specifically, they believed that the course is extremely useful to their career and knowledge, and skills gained are applicable to their job in the future. The course prepared the students for the future and was beneficial for work in the future. The students cited the answers below:

"I can use the knowledge from this course in my career. It is very important in real life".

"I got the opportunity to assess myself. It's beneficial for me in the future when I become HR personnel".



### 3. Acquisition of Critical Thinking Skills

The third top most important thing they learned from the course was how to think critically. According to the students, they learned the following: solving problems, evaluating arguments, how to argue, analyzing problems and how to deal with employees in the future, analyzing and solving problems in real work setting, how to deal with employees, opportunity to improve critical thinking, and practicing critical thinking in and out of the classroom. They specifically mentioned enhancing the RED skills: recognizing assumptions, evaluating arguments, and drawing conclusions. Some of the students' answers are as follows:

"I learned how to analyze and write case studies. Through case studies, it challenged me to think deeper."

"Aside from learning about the course, the real case studies that the instructor gave us made me understood and encourage me to analyze and solve problems like in real work setting."

"The most important thing I've learned from attending this course is how to deal about problems that occur within the organization and solve/deal with it ethically."

### 4. Recognition of the Value of the Method of Teaching

Finally, some students answered that the most important thing from the course was the method of teaching or the teaching style because according to them every time the instructor teaches, they were always paying attention and motivated to listen unlike their other classes.

"I think this course is important to me because when I was learning I would focus on the teacher and listen in class attentively and the class is clearer and easy to understand."

"The teaching style motivated me to listen unlike my other classes."

**What is the best aspect of this course?(You might like to think about the content, presentation, online Socratic discussion, Facebook Socratic discussion or the organization of the sessions you attended).**

Some students cited more than one answer. There are five main answers to the question: recognition of the value of the learning activities, learning skills,

academic achievement, recognition of the value of the method of teaching, and caring instructor.

One student commented that, "I like everything about the course. This is the best course for me".

### **1. Recognition of the Value of the Learning Activities**

According to the students, the best aspect of the course is the learning activities, specifically mentioning the Socratic discussion in class and in Facebook, presentation, and group case analysis. The students' answers were grouped into two categories:

#### **1.1 Classroom and Facebook Socratic Discussion**

The students repeatedly answered that the Socratic discussion helped them to clarify and understand the course easily and for retention as well because of the case studies. They also mentioned the convenience of using the Facebook Socratic discussion. A few, however, expressed that the Socratic discussion helped them tremendously, but it made them feel nervous and uncomfortable during the discussion. The students' answers are as follows:

"The best aspect is that the lecturer used social networking to contact/discuss the class with the students. It is the best idea and convenient way to communicate with us."

"The Q&A discussion made me alert in class as well as in group discussion."

"I mostly like the Q&A session in class where there is exchange of ideas between everyone, and this made every student easily grasp the content of the lesson."

"The Socratic discussion made me a bit anxious in class, but helped me to improve as a student."

#### **1.2 Class Presentation**

The students likewise recognized the value of class presentation. According to the students, it helped them easily understand the topics presented in class. Below are some of the students' answers:



“The presentation is the best because it helped to easily understand the lesson and to clarify problems.”

“I think presentation because it facilitated better understanding of the course and improved us in presentation.”

“The presentation is good and easy to understand, so as the content included in the course.”

### **1.3 Group Case Analysis**

The group case analysis according to the students benefited them a lot because it facilitated to better understand the case, and enhance their writing skills as well as build teamwork.

“The case studies taught us to analyze and it is really good.”

“Good case studies which helped me to think deeper.”

It is evident from the above answers that the students enhanced their critical thinking on recognizing assumptions, evaluating arguments and drawing conclusions.

## **2. Learning Skills**

Many students recognized that through the course, it challenged them to think critically, enhance their critical thinking skill and prepare them for the future. The students' answers are below:

“The best aspect is that it is applicable in my future career and helped students to think deeper when there is/are questions.”

“The best aspect of this course is that the students can apply the knowledge in the future and of course the teacher and the students.”

“This course is very important for HR students. The valuable knowledge can be used to solve problems when we worked.”

“The best aspect of the course is case studies and the group presentation. The content of the course is informative and the case studies helped us to analyze and how we can use the theoretical knowledge, analyze if the problem is there or not analyze the problem and try to fix the problem, thus preparing us to face the real situation in the future.”

### 3. Academic Achievement

The students answered that they fulfilled their expectations after the completion of the course. In gist, they commented that the content is informative and is significant and useful for their future career. Here are the students' answers:

"The course content especially case studies improved our critical thinking."

"The best aspect of this course is the content – business ethics because it is certainly important for HR people."

"Content, because it is interesting and when my teacher teaches, I understand it."

### 4. Recognition of the Value of the Method of Teaching

The students commented that the teaching style used in class is very interesting and challenged them to think and participate and not only be a spectator in class. The students' answers are as follows:

"I think when the instructor gave feedback through examples and hypothetical situations that helped a lot to easily understand the class."

"The teaching style because I can continuously study at home or anywhere I am."

"The style of teaching challenged me to think and not to only sit and listen in class."

### 5. Caring Instructor

According to the students, they appreciated the private time the instructor devoted to them as well as for being approachable and helpful. Their answers are as follows:

"The teacher always takes care of students. She gave her private time to tutor us (make-up class)."

"She is approachable and helpful."

### What is the teaching or learning problem of this course? Why?

The answers to this question were divided into four parts: No learning or teaching difficulties, course content and delivery difficulties, learning difficulties, and organization of the session difficulties.



### **1. No learning or teaching difficulties**

Most students answered that the course has no worst aspect. A few students answered as follows:

“None, the course went smoothly. We didn't have a problem.”

“The course is very interesting, but the content is squeezed into one semester only. If only the course can be extended. This course really prepares the HR students to understand the job aspect and reality of work environment.”

“Presentation and class and online discussion made the class more interesting.”

### **2. Course content and delivery difficulties**

According to the students, the worst aspects of the course included the lengthy and quite difficult cases to understand, some of students' presentations that lacked clarity, and some topics were also hard to understand. Their answers are below:

“Some presentations are long and quite confusing.”

“Some cases are quite lengthy and difficult.”

“There are different levels of difficulty of cases. Some students can finish easily, and some were not.”

“In my opinion, some of the presentations by students were not clear enough.”

“The course content confused me with my home country.”

### **3. Learning difficulties**

The students answered that the worst part of the course was to read and understand a lot of information as well as the uncomfortable experience during the Socratic discussion in class. The students commented as follows:

“I have to read a lot.”

“There are too many information to read.”

“A lot of information to digest.”

“The Q&A in class made me uncomfortable.”

### **4. Organization of the session difficulties**

One student commented that he preferred to study online rather than in the classroom. The student said that

“Organization of the sessions (I don’t like classroom discussion, it should be online always.)”.

**Did you enhance your critical thinking by studying this course (recognizing assumptions, evaluating arguments, deducting conclusions)? How?**

For this question, all of the students answered that they enhanced their critical thinking skill. Some students cited other skills developed from attending the course. The answers are divided into five parts: critical thinking skills, problem solving skills, communication and collaboration skills, integration of knowledge skills, and decision making skills.

**1. Critical Thinking Skills (RED - recognizing assumptions, evaluating arguments, and drawing conclusions)**

According to the students, they enhanced the RED skills through attending the course. All of the students cited that they were able to enhance their critical thinking skills. Some of their answers are as follows:

“Yes, the case analysis, group presentation, and class and online discussion. Teachers’ feedback, explanation and examples helped me to think deeper.”

“Certainly, some cases showed the wrongdoing of businesspeople. We learned the implications of that in organizations and we should try to do the right thing in our real life.”

“Yes, I enhanced my critical thinking, and I realized that I should read and think deeper about what I read to recognize assumptions, evaluate arguments, and make conclusions.”

“Yes, from this course, I gained a lot and I had a chance to develop my thinking critically. Because in this course, I got enough practice to analyze the case, Q&A. I really developed my understanding about the situations of the case.”

“Yes, this course challenged me to do my best, because it is difficult and challenging, and we studied the information in-depth. The teaching style (Blended learning) is very interesting, never had it before.”



**\*\*\*Note: The core of the students' answers can be found in this number. Students succinctly answered that they enhanced their critical thinking, particularly recognizing assumptions, evaluating arguments, and drawing conclusions.**

As the main goal of the BSMT model is to enhance the critical thinking skill of the undergraduate students, unexpectedly students mentioned other skills together with critical thinking. Other skills included communication and collaboration skills, integration of knowledge skills, problem solving skills, and decision making skills.

## **2. Communication and Collaboration Skills**

The students responded that they also enhanced their communication and collaboration skills. Students specifically mentioned reading skill, writing skill, teamwork, brainstorming skill, and argumentation skills. Here are their answers:

“Yes, the course taught me to read and write case study effectively and understand critically and to think first what to say later.”

“Yes, I enhanced my critical thinking skills because my teacher and classmates like to ask probing questions. Through case studies and discussion with my group, I developed teamwork as well.”

“Yes, the case studies and class and online brainstorming (Q&A) discussion always enhance our CT, evaluation of situation and deducting conclusion. When we meet with friends, we share our ideas which help us brainstorm and understand that things that we missed or forgot. This course is very interesting and useful because it's more practical than theoretical.”

“Yes, I think I improved evaluating arguments the best because when I study with my friends we can have brainstorming and evaluate the case given to us.”

## **3. Integration of Knowledge Skills**

The students responded that they were able to link the course content to real situations and that the course was an eye opening course. Their answers are as follows:

“Yes, by learning outside and inside the classroom, I integrated the knowledge and every topic I got clearly.”

“Yes, I improved my critical thinking by studying this course and I can now distinguish and link the course with reason to other topics and make conclusions.”

“Yes, I enhanced my critical thinking by searching more information about the course and working with my group. And when I become HR manager I can apply the knowledge I got from the course.”

“In studying this course, it opened my eyes to understand better and compare the system in my own country to Thailand. The topics are very interesting and useful.”

#### **4. Problem Solving Skills**

The students added that aside from critical thinking skills, they were able to enhance their problem solving skills in real situations.

“Yes, I enhanced my critical thinking about how to find solution to problems and evaluate arguments and make conclusions.”

“Yes, this course improved me a lot my critical thinking and how to analyze and solve any problems realistically.”

“Yes, definitely, especially solving problems and making conclusions.”

#### **5. Decision Making Skills**

Finally, the students cited that they improved their decision making skills. Their answers are as follows:

“Yes, evaluating arguments and making choosing the best action.”

“Working in group helped me to recognize fact from opinion, evaluate the different situations, and made decision.”

“Yes, especially making conclusions and decision making.”

**Will you recommend this course to other students? If yes / no, what will you tell them?**

This is the last question in the second part of the satisfaction survey. All of the students positively responded that they will recommend the course to other students. The answers are divided into three main reasons: professional development, personal development, and learning and innovation development.



### **1. Professional Development**

Many students repeatedly mentioned the significance and benefits of the course to their future career and in business field. They emphasized the career opportunities that they will get if they study the course. Thus, they advised the students to pay close attention to the course. Some of students' answers are below:

"Yes, I will tell them that this course is good for their future and they will learn a lot."

"Yes, because this subject is important for HRM student. It can be used in the future. I will tell them that they should be interested in critical thinking and try their best because you will get key knowledge from this course."

"Yes, I will tell them that the course is very important for their future job and they should attend the course because the teacher is very good."

"Of course, this is one of the most useful courses in the entire HRM studies, and as a HR scholar, I would recommend that every HRM student needs to take this course."

### **2. Personal Development**

The second top most answer of why the students will recommend the course to other students is the personal development that one may acquire upon studying the course. They mentioned that the course is personally fulfilling, will provide useful experience, and will be updated them about recent trends and issues in HRM. Below are the answers of the students:

"Yes, I will tell them that the course will fulfill their goals. During their study, they might be confused a bit but will surely help them in the future."

"I think when other students study this subject, they have to attend the class every time and pay attention to the teacher because all things that she teaches are very important for their future."

"Yes, I will tell them that it is a good course and will give useful experience."

### 3. Learning and Innovation Development

The students also recognized the value of learning and innovation development. According to them, students will gain different skills, such as critical thinking, writing, teamwork, solving problem, and get a chance to use technology in and out of the classroom. Some of the answers of the students are as follows:

“Yes. This course will help them develop a lot of skills such as critical thinking, teamwork, writing skill, etc.”

“Yes, it will surely develop their critical thinking skill especially making conclusions and teamwork.”

“Yes because we use critical thinking anytime, anywhere.”

“Yes, I think the course is very interesting and useful in our future. I will tell them that that if they study this course they will improve their critical thinking.”

Chapter four presented the results of the development of the Blended Socratic Method of Teaching (BSMT) model to enhance the critical thinking skills of the undergraduate business students. In the first phase of the development, the results showed that undergraduate business students have below average critical thinking skills. During the second phase of the development process, the five experts who evaluated the instructional model rated the BSMT model and the guidelines in using it as highly appropriate. In the implementation stage, the experimental group of students showed an impressive improvement in their critical thinking skill after using the teaching model. In the final phase, the students showed high satisfaction towards the teaching model.



## **CHAPTER V**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

This study focuses on the development of the Blended Socratic Method of Teaching (BSMT) model, an instructional model to enhance the critical thinking skills of undergraduate business students. This chapter concludes this study by presenting the summary, discussion, conclusion, and recommendations.

The findings will be presented according to the objectives of this study:

1. To survey the critical thinking skill of undergraduate business students.
2. To develop and validate the instructional model to enhance the critical thinking skill of the undergraduate business students.
3. To implement and determine the effectiveness of the instructional model.
4. To evaluate the level of satisfaction of undergraduate business students towards the instructional model.

#### **Summary of the Study**

This study is about the development of the Blended Socratic Method of Teaching (BSMT) model to enhance the critical thinking skills of the undergraduate business students. The instructional model was developed due to the significance of the critical thinking skill, particularly the RED-recognizing assumptions, evaluating arguments, and drawing conclusions in the business field. Also, educators are of consensus that developing the student's critical thinking has been the stated goal of educators for many decades and is considered the highest important skill sought by employers. Critical thinking is also recognized as one of the 21<sup>st</sup> century skills for learners (ATCS21S, 2014 and P21.org, 2009). As such, in this study, the business field is where the ability to think critically has always been important for its success was focused on.

The development of the model has four objectives corresponding to four phases. Phase I: To survey the critical thinking of undergraduate business students. The critical thinking skills of 371 undergraduate business students were surveyed

using a critical thinking appraisal to assess the competencies in three skill area referred to as the RED (Recognizing assumptions, Evaluating arguments, and Drawing conclusions) developed by Pearson Education [55]. The findings revealed that the students have deficient critical thinking. Phase II: To develop and validate the instructional model to enhance the critical thinking skills of undergraduate business students. The results gathered in the first phase were used as a basis in the development and validation of the Blended Socratic Method of Teaching (BSMT) model. In the second phase, the skills needed by the experimental group were identified, the components of the model were designed, and the course description was integrated into the BSMT model. Subsequent to the development of the model and the collection and analysis of data, the BSMT model was proven to be a highly appropriate instructional model in enhancing the RED-recognizing assumptions, evaluating arguments, and drawing conclusions of the undergraduate business students according to five experts. Phase III: To implement and determine the effectiveness of the instructional model. After the validation of the model, it was tested with the experimental group consisting of 40 Human Resource Management students at Naresuan University International College, by embedding the model in the course content. The implementation period lasted for 10 weeks for three hours per week. A pre-test, post-test design was used to determine the effectiveness of the BSMT model. The paired sample t-test showed that the students' critical thinking (RED) was significantly different or the post-test was higher than the pre-test. Phase IV: Evaluation of the level of satisfaction of undergraduate business students towards the instructional model showed that experimental group was highly satisfied with the course where the BSMT model was infused. The undergraduate business students written answers revealed that not only the acquisition of critical thinking skills (RED) was enhanced, but likewise other 21<sup>st</sup> century skills were enhanced.



## Discussion

Based on the data collected the findings of this study are:

**Finding 1: The undergraduate business students have deficient critical thinking in RED (Recognizing assumptions, Evaluating arguments, and Drawing conclusions) as they scored “well below average” in the critical thinking appraisal.**

The first phase of the study revealed that the undergraduate business students have deficient critical thinking, particularly the RED-recognizing assumptions, evaluating arguments, and drawing conclusions. The 371 business students (Bachelor in Business Administration) showed that the students scored “well below average” ( $\bar{x}=13.26$  and S.D. = 3.85) in the critical thinking test administered. The skills tested included: inferences, assumptions, deductions, interpreting information, and arguments, measuring the three competencies-the RED developed by Pearson Education (2013). The overall performance of the undergraduate business students revealed that they performed the lowest in inferences ( $\bar{x}=2.03$  and S.D. = 1.19) and the highest in assumptions ( $\bar{x}=2.91$  and S.D. = 1.35).

In this study, aside from theoretical and research findings presented, one may conclude that the undergraduate business students scored “well below average” in the critical thinking test because the test administered was in the English language, but the students are non-native English speakers. Although the students were given an ample opportunity to ask questions to the proctor and even allowed to look up unfamiliar vocabulary in a dictionary, the comprehension of the text might affect their test scores. Also, before administering the critical thinking test, its objectives were discussed with the students. However, some students did not take the test seriously, knowing that they would not get the score. Hence, the score was not satisfactory. Moreover, when the students were asked if they had taken a critical thinking test in the past, majority of the students responded negatively. This fact might also affect the test scores of the students.

Additionally, the undergraduate business students obtained the lowest score in inferences because the students might not know how to draw conclusions from observed or supposed facts. In short, they might not think beyond the given facts or

circumstances. Also, it might be because the students cannot separate fact from fiction. As regards assumptions and analyzing arguments, the students obtained the highest score because the students might not know how to think logically based on evidence presented. They might not perceive what is presupposed or taken for granted. Again, they might not think beyond what is presented to them. To top it all, in a Thai classroom, students are taught to listen but not to think [108, 124, 125]. The students in this study mostly studied in Thailand.

The finding is consistent with other studies by Snyder [126]; Barnett [127]; Ackerman, Gross and Perner [128] and Kayes [129]. These authors reiterated that successful workers need critical thinking because in the face of complex problems, the ability to think critically provides the tools to resolve and manage the unknowable. There was no research finding within the knowledge of the researcher that contradicts the findings that business students have deficient critical thinking skills.

An irreconcilable view is that business schools have long argued that they foster critical thinking skills, both in curriculum design and course delivery [53]. However, such claims are seldom backed by empirical design and experimentation. Likewise, despite broad acceptance and extensive theoretical attention given to critical thinking by the education community, and the fact that critical thinking was identified as the essential mental ability behind business success [14, 115, 130] still the problems about deficient critical thinking of business students still persists.

In Thailand, education policy likewise requires that Thai student should possess critical thinking skills [7]. It is stressed in the National Education Act of 1999. The educational community is inculcating critical thinking in its curricula, but Thai students still lack critical thinking, which is also true in this study. This finding is likewise supported by many researches in Thailand [12, 124, 125]. Although critical thinking is a well-researched discipline in Thailand, there were no studies within the knowledge of the researcher about critical thinking of undergraduate students in the country. Most studies were about critical thinking of students in general. Lack of research on the area might be due to lack of participants or simply no one is conducting a study in that topic.



Therefore, the theoretical and research findings in this study support the consensus that, the undergraduate business students have deficient critical thinking, particularly, the RED-recognizing assumptions, evaluating arguments, and drawing conclusions. Hence, the researcher developed the BSMT model to enhance the critical thinking of the undergraduate business students.

**Finding 2: The Blended Socratic Method of Teaching (BSMT) model is a highly appropriate instructional model to enhance the critical thinking skills of the undergraduate business students according to the five experts.**

The overall result of the evaluation by the five experts of the BSMT model revealed that it is a “highly appropriate” ( $\bar{x} = 4.83$  and S.D. = 0.54) instructional model in enhancing the critical thinking skills of the undergraduate business students. The five experts rated the model “highly appropriate” in all aspects. The experts likewise rated the guidelines on how to use the BSMT model according to the experts is “highly appropriate” in all aspects.

The “highly appropriate” rating by the experts on the BSMT model could be explained by the fact that they understood and acknowledged the purpose, necessity, and usefulness of the BSMT model in enhancing the critical thinking skills of the undergraduate business students and perceived that the model would be an effective tool because the model consisted of essential components based on well-accepted components of the teaching model by Bruce Joyce, et al. [33] The model was likewise systematically developed following the principles in the development of the teaching model [33, 38].

Moreover, the experts deemed the instructional model highly appropriate because the background and rationale for the development of the model was succinctly explained and presented. The necessity and immediacy of developing the model were clearly proven in the study.

Additionally, the model presented in its syntax (instructional process), which is considered the heart of the model, chronological steps in using the model so that it can be easily used by any teachers interested in the model. In the syntax, several interesting activities were combined, aiming to foster critical thinking, such as

working in groups, analyzing and writing of a case analysis, business case presentation, and Socratic discussion in class and in Facebook.

Also, the model is learner-centered approach where the Socratic teacher acts as a “guide on the side.” The model deviates from the Thai classroom culture mainly characterized by teacher-centered approach. As such, it might be considered a breakthrough that might transform the traditional Thai classroom culture and eventually make critical thinking as a part of the teaching community. In addition, the presence of the Socratic discussion creates an engaging and motivating learning environment for the students, hence the BSMT model provides as a highly appropriate model in fostering critical thinking.

The support system comprising of business case studies made the model applicable to the real work setting, acquainting students the workplace situations that they may encounter with the future. The Facebook discussion on the other hand provides an important medium of transforming the classroom in accordance to learning styles of the current students nowadays, which are known as digital natives.

The lowest mean, which is still highly appropriate ( $\bar{x} = 4.60$  and S.D. = 0.54) was assigned to the conformity of the principles, content, objectives, and the learning and teaching process to the measurement and evaluation of the model. The findings revealed a lower rating on the measurement and evaluation because teaching, learning, and evaluation are three interdependent aspects of the educative process. Therefore, evaluation is an indispensable part of the teaching-learning process. It involves measurement and assigning qualitative meaning through value judgments. It is also a means of determining the effectiveness of teaching methodologies, instructional materials and other elements affecting the teaching-learning situation. Similarly, Gunter [36] stated that there should be a variety of strategies or tools in the evaluation and measurement of students of students’ learning. The evaluation provided consisted of a quiz after every business case presented and monitoring of students participation in classroom and Facebook Socratic discussion, which was recorded in a class card for each student.



To top it all, the BSMT model was rated “highly appropriate” by the experts because it provides an authentic and comprehensive instructional model that will enhance the critical thinking skills of the undergraduate business students. It is for the first time that an instructional model consisted of a combination of the most powerful teaching tactic in fostering critical thinking-the Socratic method of teaching [78], blended with an important component of learning these days-ICT through the famous social networking sight, Facebook [18], plus business case studies as an important support system.

Additionally, the experts positively commented on the appropriateness of the BSMT model. When it comes to the components in the development of the model, the experts commented that there is good organization and a comprehensive review of literature. The experts also commented that the model is evidently applicable in an authentic educational setting that aims to enhance the undergraduate business students’ critical thinking. Other experts praised the BSMT model, and commented that the model is a breakthrough conforming to all expectations and principles, very precise, informative, and that teaching professionals should be made aware of it. Moreover, the experts commented positively on the guidelines on how to use the BSMT model. They also expressed that the model is highly recommended as it is clear, complete, well-planned, and easy to understand. Hence, the model is highly appropriate in the enhancement of the critical thinking skills of the undergraduate business students.

The experts’ review is supported by findings in other studies recognizing critical thinking as indispensable to business students American Management Association [3, 4, 5, 131].

With the high rating on the appropriateness of the model given by the experts, undoubtedly, it can be inferred that the model is highly suitable in the enhancement of the critical thinking skills of undergraduate business students and meets the criteria required in the development of the model. The critical thinking skills emphasized were recognizing assumptions, evaluating arguments, and drawing conclusions (the RED model of critical thinking).

**Finding 3: The Blended Socratic Method of Teaching (BSMT) Model is an effective instructional model to enhance the critical thinking skills of the undergraduate business students shown in the students' performance in the critical thinking appraisal which is significantly different.**

The findings revealed that the Blended Socratic Method of Teaching (BSMT) Model is an effective instructional model as it enhanced the critical thinking skills, particularly the RED of the undergraduate students. The pre- and post-test scores shows that the post-test score ( $\bar{x} = 25.17$  and S.D. = 3.18) is higher than the pre-test score ( $\bar{x} = 13.20$  and S.D. = 3.88) with statistical difference at 0.01 level. This means that the students enhanced their critical thinking skills from "well below average" to "below average" according to the percentile provided by Watson-Glaser. In detailed comparison, the highest improvement of the students' critical thinking is in inferences ( $\bar{x} = 2.03$  to  $\bar{x} = 5.85$ ) and the lowest is in analyzing arguments ( $\bar{x} = 3.30$  to  $\bar{x} = 5.78$ ).

The findings are supported by Korkmaz and Karakus [119, 27, 92, 27] found that the students indicated learning achievement and enhanced critical thinking after using blended instructional model. Moreover, Korkmaz and Karakus [19] confirmed that blended learning contributed more to student critical thinking dispositions and levels when compared to the traditional learning model. It was also reiterated that using information communication technology (ICT) in the classroom is becoming an ubiquitous component of learning [19] as we have students who are digital natives and it serves to individualize learning, is interactive, low cost, and climate insensitive, and so can serve multiple teaching functions with high speed delivery and uniform quality [22]. Undoubtedly, this study presented another successful method of using blended learning to enhance students' critical thinking.

Aside from the above-mentioned findings confirming the results in this study, the significant difference in the pre-test and post-test scores of the undergraduate business students are first: the students being digital natives [18] are interested in using the social networking site, Facebook. Studying to them became more engaging and motivating, which contributed to enhance critical thinking. The Socratic discussion served to individualize learning [22] and students were more comfortable communicating [132]. As a proof of the effectiveness of the model: 1) The students



Facebook discussion extended hours of studying which lasted from 3 days to 21 days or 3 weeks compared to 3 hours traditional classroom discussion. 2) Also, students posed unlimited questions and/or answers. The highest number of questions and answers altogether reached 98 and the lowest was 67. It is unimaginable how to cover and have an in-depth discussion of a topic and have at least 67 questions and/or answers in 3 hours! And the fact that the students can go back anytime to the posted topic is relief to the students as when there are issues unclarified, they can go back anytime to the Facebook discussion. 3) In addition, the students were studying 24/7. The students discussed 24 hours a day from Monday to Sunday including holidays. Students were still posting questions and/or answers. Students were also discussing even in the wee hours, e.g., at 2:00 in the morning. 4) Students asked questions and/or answers voluntarily. The students voluntarily and willingly asked and/or answered questions, and even answered or give additional answers on behalf of their classmates. It is interesting how students voluntarily and willingly participated in the discussion. 5) The students asked clarificatory questions both of the instructors and their classmates. It is very uncommon in Thai classroom culture to ask clarification of instructor or teachers Kakkar [133]. 6) Students had self-initiative to start the discussion which never happens in a traditional classroom discussion. The fear of 'losing face' in front of the classmates inhibits students from initiating the class discussion, but it is the opposite in the case of using the Blended Socratic method. 7) The students did some research related to the topic and posted the link in the Facebook account. 8) The students could answer at a minimum three full sentences, which does not happen in traditional classroom discussion. In the classroom, students mostly answered in broken sentences because of fear of criticism from the instructor and classmates. 9) The passive students, those who do not normally speak in class became active students in the discussion. Students felt that they have the freedom of typing their answers and outside the prying eyes of the instructors and classmates. 10) Ability to express agreement or disagreement: The students could express their agreement or disagreement with their classmates or the instructors and offered other ideas or opinion. 11) Confidently answering questions: The students could confidently answer the question posted by the instructor. 12) Ability to ask logical questions:

The students could ask questions indicating that they critically analyzed the case. It is included in the RED skills—analyzing arguments. 13) Ability to give logical answers: The students showed how they critically analyzed the problems and questions presented in the case by giving logical answers based on reasons and offered solutions. It is interesting how students could frame answers better than in the traditional classroom discussion. 14) Clarified students' role: Motivated and active students are clearly visible in using the model. Since the students know their role and what is expected of them, students performed as such in class. 15) Instructors' (Teachers') role as a guide on the side: The instructor gave immediate and continuous feedback to students' answers and/or questions round the clock. In order to keep up with the students, the instructor asked and/or answered even in wee hours, e.g., 3:00 in the morning. No question or answer was left unnoticed by the instructor. Positive comments or simply an acknowledgement will be posted on Facebook. These facts inspire, motivate, and stimulate students to think deeper, participate, and be an active learner. The Socratic-teacher's (instructor) role in the effective implementation of the model as he/she serves as a light in keeping the discussion focused and going.

Using the Socratic method of teaching has proven to be an effective method in enhancing the critical thinking of the undergraduate business students. In this study, focus was on having digital natives as students. They were a big challenge; hence this model is the answer. In support of these findings, Merritts and Walter [79, 78, 17, 18, 16, 47], emphasized that since antiquity, the Socratic method of teaching has been recognized as an effective approach of enhancing critical thinking skills and is the oldest yet still the most powerful teaching tactic for fostering critical thinking. It is also considered the "coping-stone" of the educational system and Whiteley [16] the "finishing touch" for the process of learning.

The findings in this study are reinforced in the study conducted by Tucker and Neely [120, 28]. In their studies, they affirmed that incorporating the Socratic approach as part of an online study developed the critical thinking skills of students are reflected in this study. The blended learning quality of the sessions provided an effective alternate for students to interact and engage with the material using the Socratic method and likewise provides new opportunities to meet the needs of diverse



learners. As the students showed an impressive improvement of their critical thinking and the literature supports the BSMT model, it is, therefore, concluded that it is an effective and highly appropriate instructional model in the enhancement of the critical thinking skills of undergraduate business students.

**Finding 4: The undergraduate business students are highly satisfied with the Blended Socratic Method of Teaching (BSMT) Model as they evaluated the model strongly satisfied in all aspects-objectives, syntax, content, support system, principles of reaction, the social system, measurement and evaluation, and impact on students and students self-rated accomplishments.**

The results show that the HRM students are “highly satisfied” with the BSMT model. Students were highly satisfied with the BSMT model because of the following reasons; first, students were able to enhanced their critical thinking, and they learned to recognize assumptions, evaluate arguments and draw conclusions after attending the course; second, according to the students, they were strongly satisfied that the BSMT model through the use of group assignment, writing of case analysis, class presentation, and Socratic discussion in class and in class Facebook account enhances their critical thinking. According to Joyce, et al. [33], the syntax or the instructional process is the heart of teaching models or it is the model in action, which is also true in the BSMT model. As such, the students became accustomed with the process; third, the content was presented in an orderly manner, enhanced their critical thinking, and they recognized their applicability for their future career (business field); fourth, the teaching materials (support system), consisting of case studies were clear, helped in enhancing critical thinking, and were applicable to their future career while the class Facebook account helped them to study anytime and anywhere and were convenient to use; fifth, the teacher-student interaction or rapport (principles of reaction), the intellectual and confrontational climate through probing questions helped students to think more, the dialectic style enhanced students’ critical thinking, and the environment of respect during the discussion stimulates students to think critically; sixth, the social system of the instructional model. The collaborative structure of teaching between students and instructor stimulated students to think more; the role of the instructor as a “guide on the side” helps students to think critically; and finally, the

continuous feedback provided by the instructor stimulated students to think more; seventh, the criteria for evaluation were appropriate and the requirements of the course were measured appropriately.

The students' overall rating on the BSMT model, of the eight categories rated, gave the highest rating to "The social system" (activities) ( $\bar{x} = 4.66$  and S.D. 0.39). The social system includes the collaborative structure of teaching between students and the instructor, the instructor being a "guide on the side," and continuous feedback provided by the instructor which are all intended to help students to think critically. This is consistent with some of the seven C's of the 21st century teaching by Ferguson [105], such as clarify, where teachers are able to diagnose students' skills and knowledge, and then are able to explain ideas in multiple ways to help each students grasp concepts and clear up confusion, similar to giving continuous feedback in this study; challenge, where teachers press students to reason their way through challenging questions analogous to this study; and confer, where teachers ask students for their views and provide positive reinforcement for their efforts. Teachers also encourage students to express themselves with one another. In this study, the students appreciated the collaborative and intellectual nature of discussion as they were all centered to the students, and they somehow felt that they have control over their learning, where someone (instructor) can clarify and challenge and at the same time confer their learning.

The students rated the second highest "Teacher-Student interaction or Rapport (Principles of Reaction)" ( $\bar{x} = 4.49$  and S.D. 0.42). This is supported by one of the seven C's of the 21st century teaching: caring teacher, where teachers help students feel emotional safe and go out of their way to help [105]. It shows that students can enhance their critical thinking in an environment where there is respect and a good relationship between the instructor and the teacher. The fact that students were challenged by probing questions likewise contributed to enhancing students' critical thinking. In this regard, this result could be explained by the fact the instructor-researcher has a good rapport with the student. They perceived the teacher as someone who shows compassion to them which helped them to be motivated and engaged in the learning process.



These findings presented a proof that our students/learners' learning style is evolving-from traditional classroom to a blended classroom. Traditional classroom instruction might sooner become a thing of the past. The findings also suggested that the learners are keen in self-directed learning, where they can experience a sort of freedom 'doing it in their own way,' and in the method that they are very familiar with-using technology. Students likewise exhibited the qualities of a constructivist learner. During the learning process using the model, they eagerly do it in their own way.

### **The open-ended questions of the satisfaction survey**

1. The open-ended questions administered to students revealed that the most important thing the students have learned from attending the course comprised of 1) academic achievement, 2) recognition of the importance of the course to future career, 3) acquisition of critical thinking skills, and 4) recognition of the method of teaching. The students emphasized that they learned how to act as ethical employees in the future, how to protect themselves and their employees and how to work in an ethical environment. These revelations indicate the enhancement of students' critical thinking. Recognizing assumptions which is one of the critical thinking skills sought to be enhanced in this study refers to an inference, an opinion about a person, place or philosophical position, Piscitelli [54] and an ability to separate fact from opinion [53]. In addition, the undergraduate students stated that they recognized the value of the method of teaching used in class and acquired critical thinking skills through the use of the BSMT model, particularly, solving problems, evaluating arguments, how to argue, analyzing problems and how to deal with employees in the future, analyzing and solving problems in real work setting, how to deal with employees, opportunity to improve critical thinking and practicing critical thinking in and out of the classroom. These skills are evidently in accordance with the RED skills: recognizing assumptions, evaluating arguments, and drawing conclusions.

2. In the second open-ended question, the findings revealed that the best aspect of the course consisted of 1) learning activities, 2) learning skills, 3) academic achievement, 4) method of teaching, and 5) caring instructor. According to the students, the best aspect of the course was the learning activities, specifically

mentioning the Socratic discussion in class and in Facebook, presentation, and group case analysis. It is evident from the above answers that the learning activities enhanced students' critical thinking on recognizing assumptions, evaluating arguments and drawing conclusions (RED Model of critical thinking). Aside from learning activities, the students likewise recognized learning skills, academic achievement and once again the method of teaching used in class. Those answers show how students exercised the critical thinking skills (RED) for undergraduate business students. Another factor that the students appreciated about the course was the caring instructor. According to the students, they appreciated the private time the instructor devoted to them as well as for being approachable and helpful. These findings are analogous to the seven C's of 21st century teaching developed by Ferguson [105]. The C's referred to is "Caring." Ferguson mentioned that a caring teacher is one who helped students to feel emotionally safe and was willing to help the students. The caring teacher can be considered one of the factors in the success of the BSMT model. Corollary to this finding, the instructor-researcher has been evaluated and branded by the students during evaluation in other subjects being compassionate and always willing to listen and lend a hand to the students. These perceptions towards the instructor-researcher positively influenced the model employed in class.

3. The third open-ended question is the teaching or learning problem of the course using the BSMT model. There were three main answers: no learning or teaching difficulties, course content and learning difficulties, and organization of the session difficulties. The main response of the students was no teaching or learning difficulties. The course went smoothly, and they wished that they had more than a semester to study the course. On the other hand, a few of the students responded that they experienced course content and learning difficulties. A few of the students commented that the worst aspects of the course included understanding the lengthy and quite difficult cases, some of students' presentations that lacked clarity, some topics that were hard to understand, to reading and digesting a lot of information as well as uncomfortable feeling during the Socratic discussion in class. This finding is explained and supported by Raktham [108]. In his study, he characterized that teacher-centered style describes Thai classrooms and the students' initiative in class is rare.



He added that this passive learning is deep-rooted in classroom culture where Thai students are taught to be passive, obedient and respectful to teachers. This attitude creates a compliance culture where there is considerable reliance on teachers. The BSMT model is a student-centered teaching model; hence few of the students had difficulty shifting from a teacher-centered style to a student-centered style. Finally, a student commented that the class should have been organized using only the Facebook Socratic discussion rather than mixing both class and Facebook Socratic discussion. This could be explained by the fact that the students nowadays are considered digital natives. According to the Economist [18], there are no students more adept in technology than the students we have right now-the digital natives.

#### 4. Skills Developed Using the BSMT Model

The fourth question is whether the students enhance their critical thinking by studying the course and using the BSMT model. The students unanimously answered that they enhance their critical thinking skill. The answers are divided into five parts: critical thinking skills, problem solving skills, communication and collaboration skills, integration of knowledge skills, and decision making skills.

##### The RED Critical Thinking Skills

The class is in complete agreement that they enhanced their critical thinking by attending the course particularly mentioning the RED-recognizing assumptions, evaluating arguments, and drawing conclusions. The BSMT model undoubtedly enhanced the critical thinking skills of undergraduate business students. The critical thinking skills developed are in consonance with the RED model of critical thinking. Recognizing assumptions as an element of the RED is the ability to separate fact from opinion [53], and it is forming an inference, an opinion or a belief about (among other things) a person, place, or philosophical position; and an ability to separate fact from fiction. Piscitelli [54] Evaluating arguments as an element of the RED entails ability to analyze information objectively and accurately, questioning the quality of supporting evidence, and understanding how emotion influences the situation [53]. Finally, drawing conclusions as the last element of the RED is the ability to bring diverse information together to arrive at conclusions that logically

follow from available evidence without generalizing the evidence [53]. Based on the students' response, the RED critical thinking skills are undisputedly present.

#### The BSMT Model Enhances 21st Century Skills

Surprisingly, aside from the RED critical thinking skills, the students unexpectedly mentioned other skills together with critical thinking. Other skills included communication and collaboration, integration of knowledge, problem solving, and decision making. The students responded that they enhanced their communication and collaboration skills. Students specifically mentioned reading skill, writing skill, teamwork, brainstorming skill, and argumentation skills. Also after attending the course, they mentioned that they were able to integrate their knowledge to real situations and explicitly mentioned that it was an eye opening course. The students likewise added that aside from critical thinking skills, they were able to enhance their problem solving skills in real situations. Finally, the students cited that they improved their decision making skills. The above-mentioned are all enshrined in the framework of 21st century skills. According to the Partnership for 21st century skills (p21.org, n.d.), the three broad skills required for the 21st century learners are 1) learning and innovation skills, 2) information, media and technology skills, and 3) life and career skills. The findings in this study are well supported by skills embodied in the 21st century skills, including critical thinking and problem solving, communication and collaboration, and ICT literacy.

The BSMT model likewise enhanced the students' communication and collaboration skills another 21st century skills according to P21.org (n.d.). The findings revealed that the students worked in a group in the analysis and writing of the business case analysis assigned. Students exhibited the two skills embodied in the 21st century skills; communicate clearly and collaborate with others. Because of the presence of working in groups, class presentation, and class and Facebook Socratic discussion in the BSMT model, the students were able to articulate in oral, written and nonverbal communication skills; listen effectively to decipher meaning, including knowledge, values, attitudes and intentions; utilize multiple media and technologies; and communicate effectively in diverse environments. Furthermore, collaboration was only visible due to the students' demonstration of the ability to work effectively and



respectfully with diverse teams. The element of respect is likewise present in the model. Also, the students' collaboration was developed as it is shown by their shared responsibility for collaborative work and value the individual contributions made by each team member.

As regards the ICT skills, due to the presence of Facebook Socratic in the model, the students were exposed to using ICT. According to the P21.org (n.d.), ICT literacy refers to applying technology effectively; using technology as a tool to research, evaluate and communicate information; and using digital technologies (computers, PDAs, media players, GPS, etc.), communication/networking tools and social networks appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy. The findings showed that the students possessed the qualities of ICT literacy mentioned.

Based on the discussion, the effectiveness of the BSMT model is demonstrated not only in the enhancement of the 21st century skills-critical thinking skills of the undergraduate business students, but also the enhancement of other 21st century skills such as learning and innovation skills, technology skills, and life and career skills.

5. The last question in the second part of the satisfaction survey is whether the undergraduate business students will recommend the course to other students. The students were in complete agreement that they would recommend for three main reasons: professional development, personal development, and learning and innovation development. The students repeatedly responded the significance and benefits of the course to their future career and in the business field. They emphasized the career opportunities that the students would get if they studied the course. Thus, they advised the students to pay close attention to the course. The students likewise responded that they would recommend the course to other students because of the personal development that one may acquire upon studying the course. They mentioned that the course was personally fulfilling, provided useful experience, and updated them about recent trends and issues in HRM. The students recognized as well the value of learning and innovation development. According to them, students would possess different skills such as: critical thinking, writing, teamwork, solving problem, and get a chance

to use technology in and out of the classroom. These findings are consistent with the 21st century skills including learning and innovation skills (P21.org, n.d.)

Based on the responses of the undergraduate business students, undoubtedly, the BSMT model is a holistic and effective instructional model that successfully enhanced the RED critical thinking skills.

### **Conclusion**

It is a disturbing revelation that despite the comprehensive efforts according to the teaching community of fostering critical thinking skills, the employers are still complaining of the lack of critical thinking skills of their workforce. In the investigation conducted in this study, the undergraduate business students was ascertained as having deficient or lack critical thinking skills particularly in Recognizing assumptions, Evaluating arguments, and Drawing conclusion or simply the RED of critical thinking. The vast gap to fill now is who should be held culpable for the deficiency. Is it the higher education curriculum, the instructors/lecturers, the students, or the culture? However, despite the broad and extensive theoretical attention given to critical thinking by the education community, the problems about its lack or deficiency for business students still persists. Instead of having a blame game, accepting responsibility, which is beyond possible and concerted efforts toward bringing an emphasis on critical thinking into legislation, should be the theme of the discussion. In this way, critical thinking will not only be an important requirement to complete a degree but will be embedded in the teaching community.

The BSMT model successfully enhanced the critical thinking skills of the undergraduate business students. There is complete agreement from the experts as well as the undergraduate business students that the Blended Socratic Method of Teaching (BSMT) model is highly appropriate in enhancing the RED critical thinking skills. Also, after implementing the model, the class demonstrated significant difference in their critical thinking. Theoretical and research findings on every component of the model exhibited the effectiveness of the model. Interestingly, based on the study, the BSMT model has demonstrated to be effective not only in the enhancement of the 21st century skills-critical thinking skills of the undergraduate business students, but also



the enhancement of other 21st century skills such as learning and innovation, technology, and life and career skills.

Through meeting the requirement of producing business graduates equipped with critical thinking skills, the stated goals of the educators and the business world will be fully satisfied. Not to mention equipping the students with the 21<sup>st</sup> century skill.

### **Recommendations**

The study shed light on an instructional model (BSMT) for undergraduate business students that enhance the critical thinking skills, particularly evaluating arguments, recognizing assumptions, and drawing conclusion. There are five recommendations for the higher education.

1. Business education needs to redefine its ultimate goal so that the critical thinker becomes a component part of the business world. As employers are seeking a workforce who possesses critical thinking skills, higher education should evaluate and create goals for graduates that will meet the standards set forth by the business world. Higher education should create goals emphasizing higher order thinking-critical thinking.

2. Critical thinking needs to move from being a 'program' to being a part of the culture where critical thinking is embedded in the teaching community. Critical thinking should not be taught only in few courses but should be embedded in all courses. It is a skill that is required to be taught to students not for the sake of completing the requirements of the course and a degree. It should become part of the teaching culture. The finding is sending an important message to the teaching community, including those responsible for enacting legislation in education. It might be the best time to reform the Thai classroom teacher-centered style of learning to student-centered learning aimed at fostering students' critical thinking. As such, the researcher endeavored to develop a teaching model that will mitigate if not entirely cure the deficiency.

3. Colleges or universities should prepare their instructors/lecturers to teach critical thinking. No matter how good the goals and the program, if the instructors/lecturers have inadequate capacity to teach or embed critical thinking, the goals will not be materialized.

4. Develop infrastructure to support the paradigm. Teaching critical thinking might be challenging if there is insufficient infrastructure.

5. Reward teachers who perform well. The teachers/lecturers are one of the most important components in the success of teaching critical thinking skills.

For educators and other members of the teaching community who are interested in using the BSMT model, the following must be remembered:

1. A thorough study of the model, particularly the guidelines on how to use it should be studied in detail before using it.

2. The syntax or the instructional process is the heart of the model; as such teachers should study it in detail to effectively apply in teaching.

3. Be sure that you have an adequate support system (teaching materials) that will create a comfortable learning environment and interesting material as well. In this business case studies were used.

4. The model is specifically applicable to older students (university students); however, though some parts some parts of the model may be modified to suit the goals of a course.

5. The teacher should remember to foster respect during the Socratic discussion in class and in Facebook. As the model is requiring a confrontational climate, maintaining respect will help students feel comfortable during the discussion.

6. As the model is learner-centered, the teacher should bear in mind to provide feedback throughout every step of the model as well as being a “guide on the side”.

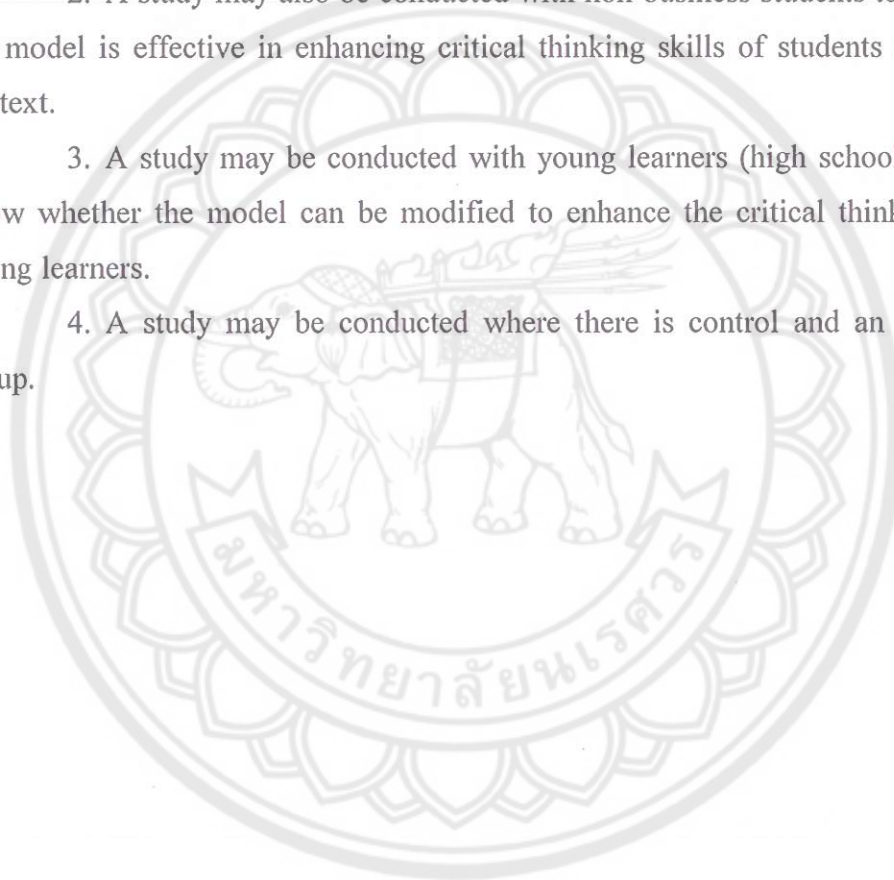
7. The teacher should make sure that the students have access to a computer and the Internet before using the model.



### For Further Study

Although the BSMT model received an outstanding evaluation from the experts as well as the students where it was tested, it is still advisable to verify its effectiveness, hence, the following are recommended:

1. Another study may be conducted with a group of business students and the testing period should be longer than 10 weeks. It is even better if the model will be used from the first year of study of the students until third or fourth year of study.
2. A study may also be conducted with non-business students to test whether the model is effective in enhancing critical thinking skills of students from another context.
3. A study may be conducted with young learners (high school students) to know whether the model can be modified to enhance the critical thinking skills of young learners.
4. A study may be conducted where there is control and an experimental group.





## REFERENCES



## REFERENCES

- [1] Scriven, M. and Paul, R. (1992). **Critical thinking defined. Paper presented at the critical thinking conference of the foundation for critical thinking.** Atlanta: GA.
- [2] Paul, R. and Elder, L. (2008). **The miniature guide to critical thinking concepts and tools.** N.P.: Foundation for Critical Thinking.
- [3] AMA Group. (May 4, 2011). **Importance of critical thinking.** Retrieved June 30, 2013, from <http://www.nationmultimedia.com/2011/05/04/business/Importance-of-critical-thinking-30154554.html>
- [4] Chartrand, J., Ishikawa, J. and Flander, S. (2013). **Critical thinking means business: Lean to apply and develop the new #1 workplace skill.** Retrieved October 30, 2013, from [http://thinkwatson.com/downloads/Pearson\\_TalentLens\\_Critical\\_Thinking\\_Means\\_Business.pdf](http://thinkwatson.com/downloads/Pearson_TalentLens_Critical_Thinking_Means_Business.pdf)
- [5] Paulson, E. (2011). Group communication and critical thinking competence development using a reality-based project. **Business Communications Quarterly**, 399, 399-411.
- [6] Ennis, R. (1997). **Incorporating critical thinking in the curriculum.** Retrieved May 2, 2014, from <http://www.criticalthinking.net/IncorporatingCriticalThinkingInTheCurriculum.pdf>
- [7] The Office of the National Education Center. (1996). **The national education policy.** Bangkok, Thailand: Atthapornkarnpim.
- [8] Naresuan University. (2013). **About Naresuan University.** Retrieved May 2, 2014, from [http://www.nu.ac.th/a1\\_aboutnu.php](http://www.nu.ac.th/a1_aboutnu.php)
- [9] Partnership for 21st century learning. (n.d.). **Framework for 21st century learning.** Retrieved May 30, 2014, from <http://www.p21.org/our-work/p21-framework>
- [10] Assessment and Teaching of the 21st Century Skills. (2014). **What are 21st century skills.** Retrieved May 30, 2014, from <http://atc21s.org/index.php/about/what-are-21st-century-skills/>

- [11] Jerald, C.J. (2009). **Defining a 21st century education**. Retrieved May 30, 2014, from [http://www.cfsd16.org/public/\\_century/pdf/Defininga21stCenturyEducation\\_Jerald\\_2009.pdf](http://www.cfsd16.org/public/_century/pdf/Defininga21stCenturyEducation_Jerald_2009.pdf)
- [12] Kaowiwattanakul, S. (2012). Revitalization of critical thinking in Thailand. **Naresuan Payao Journal**, 5(1), 7-17.
- [13] Taylor, P.G. (2000). Changing expectations: Preparing students for flexible learning. **The International Journal of Academic Development**, 5(2), 107-115.
- [14] Smith, G.F. (2003). Beyond critical thinking and decision making: Teaching business how to think. **Journal of Management Education**, 27(1), 24-51.
- [15] Rimer, H. (2011). **Study: Many college students not learning to think critically, the Hechinger report**. Retrieved February 20, 2014, from <http://www.mcclatchydc.com/2011/01/18/106949/study-many-college-students-not.html>
- [16] Whiteley, T.R. (2006). **Using the socratic method and Bloom's taxonomy of the cognitive domain to enhance online discussion, critical Thinking, and student learning**. Retrieved June 18, 2013, from <http://sbaweb.wayne.edu/~absel/bkl/.%5Cvol33%5C33ai.pdf>
- [17] Reich, R. (2003). The socratic method: What is it and how to use it in the classroom. **Speaking of Teaching Stanford University Newsletter on Teaching**, 13(1), 55-62.
- [18] The Economist Intelligence Unit. (2008). **The future of higher education: How technology will shape learning**. Retrieved June 18, 2013, from [http://www.nmc.org/pdf/Future-of-Higher-Ed-\(NMC\).pdf](http://www.nmc.org/pdf/Future-of-Higher-Ed-(NMC).pdf)
- [19] Iordache, D. and Lamanauskas, V. (2013). Exploring the usage of social networking websites: Perceptions and opinions of romanian students. **Informatica Economica**, 7(4), 18-25.
- [20] De Watteville, A. and Gilbert, L. (2000). **Advanced information and communication technology**. Oxford: Heinemann Educational.



- [21] Kaplan, A.M. and Haenlein, M. (2010). **Users of the world, unite! the challenges and opportunities of social media**. Retrieved June 30, 2014, from <http://michaelhaenlein.eu/Publications/Kaplan,%20Andreas%20-%20Users%20of%20the%20world,%20unite.pdf>
- [22] Redd, U.V. (n.d.). **Role of ICTs in education and development: Potential, pitfalls and challenges**. Retrieved May 30, 2014, from [http://www.unesco.org/education/aladin/paldin/pdf/course01/unit\\_13.pdf](http://www.unesco.org/education/aladin/paldin/pdf/course01/unit_13.pdf)
- [23] Fahlvik, M. (2013). **What is blended learning?** Retrieved January 15, 2014, from <http://www.itslearning.eu/what-is-blended-learning>
- [24] University of Central Florida. (n.d.). **Benefits of blended learning**. Retrieved June 30, 2014, from <https://blended.online.ucf.edu/about/benefits-of-blended-learning/>
- [25] Bart, M. (n.d.). **The benefits of blended learning**. Retrieved December 20, 2013, from <http://hilo.hawaii.edu/academics/dl/documents/BenefitsofBlended.pdf>
- [26] U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. (2010). **Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies**. Retrieved May 5, 2015, from <https://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>
- [27] Khantapthai, T., Ruangsawan, C. and Suksringarm, P. (2011). **A development of a blended learning model for learning an information technology for life course of undergraduate students at Rajabhat University**. Retrieved January 30, 2014, from <http://medwelljournals.com/abstract/?doi=ssscience.2011.323.327>
- [28] Gilbert, J.A. and Flores-Zambada, R. (2011). Development and implementation of a “blended” teaching course environment. **Journal of Online Learning and Teaching**, 7(2), 244-260.
- [29] Lundberg, C. (2001). Teaching business education management writing case studies. **Journal Management Education**, 25(4), 450-463.

- [30] Kuh, G.D. (2008). **High-impact educational practices: Why they are, who has access to them, and why they matter**. Washington, DC: Association of American Colleges and Universities.
- [31] Colby A., Ehrlich, T., Sullivan, W.M. and Dolle, J.R. (2011). **Rethinking undergraduate business education**. USA: Jossey-Bass.
- [32] Flores, K.L., Matkin, G.S., Burbach, M.E. (2012). Deficient critical thinking skills among college graduates: Implications for leadership. **Educational Philosophy and Theory**, 58(12), 212-230.
- [33] Joyce, B., Weil, M. and Calhoun, E. (2009). **Models of teaching**. Pearson, U.S.A.: n.p.
- [34] Eggen, P.D. and Donald, K.P. (2012). **Strategies and models for teachers: Teaching content and thinking skills**. Boston: Pearson.
- [35] Scheffler, I. (1965). Philosophical models of teaching. **Harvard Educational Review**, 35(2), 131-143.
- [36] Gunter, M., Estes, T.H., and Schwab, J. (1995). **Instruction a models approach**. N.P.: Allyn and Bacon.
- [37] Lyman, F. (1987). Think-pair-share: An expanding teaching technique. **MAA-CIE Cooperative News**, 1(1), 1-2.
- [38] Groccia, J.E. (1997). **A model for understanding university teaching and learning**. Retrieved May 30, 2014, from [http://www.sagepub.com/upm-data/47538\\_ch\\_1.pdf](http://www.sagepub.com/upm-data/47538_ch_1.pdf)
- [39] Dewey, J. (1909). **How we think**. Boston, D.C.: Heath and Co5-20.
- [40] Glaser, E.M. (1941). **An experiment in the development of critical thinking, teacher's college, Columbia University**. Retrieved August 15, 2013, from <http://www.criticalthinking.org/pages/defining-critical-thinking/766>
- [41] Ennis, R.H. (1962). A concept of critical thinking. **Harvard Educational Review**, 32(1), 81-111.
- [42] Ennis, R.H. and Weir, E. (1985). **The ennis-weir critical thinking test**. Retrieved May 2, 2014, from [http://faculty.education.illinois.edu/rhennis/tewctet/Ennis-Weir\\_Merged.pdf](http://faculty.education.illinois.edu/rhennis/tewctet/Ennis-Weir_Merged.pdf)
- [43] Lipman, M. (1988). Critical thinking-what can it be? **Educational Leadership**, 46(1), 38-43.



- [44] Paul, R. (1984). Critical thinking: Fundamental to education for a free society. **Educational Leadership**, 42(1), 4-14.
- [45] Facione, P.A. (2010). **Critical thinking: What it is and why it counts**. Retrieved October 5, 2013, from [www.insightassessment.com/pdf\\_files/what&why2006.pdf](http://www.insightassessment.com/pdf_files/what&why2006.pdf)
- [46] Menkes, J. (2005). **Executive intelligence what all great leaders have**. Retrieved October 5, 2013, from <http://lib.nu.edu.sa/uploads/m1/29.pdf>
- [47] Chaffee, J. (2013). **The philosopher's way: Thinking critically about profound ideas**. N.P.: Pearson.
- [48] Halpern, D.F. (2003). **Thought and knowledge: An introduction to critical thinking**. Mahwah, NJ: Lawrence Erlbaum Associates.
- [49] Chaffee, J. (2006). Teaching critical thinking across the curriculum. **New Directions for Community Colleges**, 20(10), 25-35.
- [50] Paul, R. and Elder, L. (2010). **The miniature guide to critical thinking concepts and tools**. Dillon Beach: Foundation for Critical Thinking.
- [51] Paul, R. and Elder, L. (2009). **The thinker's guide to intellectual standards**. Dillon Beach CA: Foundation of Critical Thinking.
- [52] Niewoehner, N.J. (n.d.). **Applied disciplines: A critical thinking model for engineering**. Retrieved September 25, 2013, from <http://www.criticalthinking.org/pages/applied-disciplines-a-critical-thinking-model-for-engineerin/578>
- [53] Coleman, B.J., Mason, P., Steagall, J.W. (2012). Does a business curriculum develop or filter critical thinking? **American Journal of Business Education**, 55(22), 409-416.
- [54] Piscitelli, S. (2012). **A model for critical thinking**. Retrieved August 15, 2013, from <http://stevepiscitelli.wordpress.com/2012/01/15/a-model-for-critical-thinking/>
- [55] Pearson Education. (2013). **What is Critical Thinking**. Retrieved May 5, 2014, from <http://www.talentlens.co.uk/assets/resources/Tips-on-Critical-Thinking.pdf>
- [56] Ennis, R.H. (1999). **Annotated list of critical thinking tests**. Retrieved June 25, 2014, from <http://www.criticalthinking.net/CTTestList199.html>

- [57] Facione, P.A. (1990). **The delphi report critical thinking: A statement of expert consensus for purposes of educational assessment and instruction.** Retrieved October 5, 2013, from [http://assessment.aas.duke.edu/documents/Delphi\\_Report.pdf](http://assessment.aas.duke.edu/documents/Delphi_Report.pdf)
- [58] Ennis, R.H. (2009). **An annotated list of critical thinking tests.** Retrieved May 2, 2014, from [http://faculty.education.illinois.edu/rhennis/TestListRevised11\\_27\\_09.htm](http://faculty.education.illinois.edu/rhennis/TestListRevised11_27_09.htm)
- [59] Halpern, D.F. (2012). **The halpern critical thinking assessment (HCTA).** Retrieved May 13, 2014, from <https://sites.google.com/site/dianehalperncmc/home/research/halpern-critical-thinking-assessment>
- [60] Watson, G. and Glaser, E.M. (1991). **Watson-glaser critical thinking appraisal manual.** London: Psychological Corporation.
- [61] Center for the Study of Higher Education. (2001-2002). **The NCTLA assessment institute, a three-day program for educators: Resource notebook.** N.P.: Penn State University.
- [62] Pearson Education. (2012). **Watson-glaser critical thinking appraisal user guide and technical manual.** Retrieved May 5, 2014, from <https://www.talentlens.co.uk/assets/news-and-events/watson-glaser-user-guide-and-technical-manual.pdf>
- [63] The Conference Board, Partnership for 21st Century Skills, Corporate Voices for Working Families, and the Society for Human Resource Management. (2006). **Are they really ready to work? employers perfectives on the basic knowledge and applied skills of new entrants to the 21st century US workforce.** Retrieved August 30, 2013, from [http://www.p21.org/storage/documents/FINAL\\_REPORT\\_PDF09-29-06.pdf](http://www.p21.org/storage/documents/FINAL_REPORT_PDF09-29-06.pdf)
- [64] Osborne, W.J. (1934). **Testing thinking.** *Journal of Educational Research*, 27(1), 402.
- [65] McGuinness, C. (2000). **Activating children's thinking skills ACTS: A methodology for enhancing thinking skills across the curriculum.** Retrieved August 30, 2013, from <http://www.tlrp.org/pub/acadpub/Mcguinness2000.pdf>



- [66] Paul, R. (2005). The state of critical thinking today. **New Directions for Community Colleges**, 130(5), 27-38.
- [67] Lizzio, A. and Wilson, K. (2007). Developing critical professional judgment: The efficacy of a self-managed reflective process. **Studies in Continuing Education**, 29(3), 277-293.
- [68] Pithers, R.T. and Soden, R. (2000). Critical thinking in education: A review. **Educational Research**, 42(3), 237-249
- [69] Taba, H. (1962). **Curriculum development: Theory and practice**. New York: Harcourt, Brace and World.
- [70] McBride, R., Gabbard, C. and Miller, G. (1990). Teaching critical thinking skills in the psychomotor domain. **The Clearing House Psychomotor Domain**, 63(10), 197-201.
- [71] Dewey, J. (1916). **Democracy in education**. New York: Macmillan.
- [72] Thelen, H. (1960). **Education and the human quest**. New York: Harper and row.
- [73] Ausubel, D.P. (1963). **The psychology of meaningful verbal learning**. New York: Gruene and Stratton.
- [74] Robinson, D.H. and Skinner, C.H. (1996). Why graphic organizers facilitate search processes: Fewer words or computationally effective indexing? **Contemporary Educational Psychology**, 21(2), 161-180.
- [75] Gordon, William, J.J. (1961). **Synectics the development of creative capacity**. New York: Harper and row,
- [76] Lavine, T.Z. (1984). **From socrates to sartre**. New York: Bantam Books.
- [77] Magee, B. (2001). **The story of philosophy**. New York: Dorling Kindersly.
- [78] Paul, R. and Elder, L. (1997). **Foundation for Critical Thinking**. Retrieved December 3, 2013, from [www.criticalthinking.org](http://www.criticalthinking.org)
- [79] Merrits, D. and Walter, R. (2006). **What is socratic questioning**. Retrieved December 20, 2013, from <http://serc.carleton.edu/introgeo/socratic/second.html>
- [80] Oxford Dictionary. (2014). **Coping stone**. Retrieved June 25, 2014, from <http://www.oxforddictionaries.com/definition/english/coping-stone>
- [81] Kraut, R. (2014). **Socrates**. Retrieved January 5, 2014, from <http://www.britannica.com/EBchecked/topic/551948/Socrates>

- [82] Paul, R. and Elder, L. (2006). **The thinker's guide to the art of socratic questioning**. Retrieved October 22, 2013, from [http://www.criticalthinking.org/TGS\\_files/SocraticQuestioning2006.pdf](http://www.criticalthinking.org/TGS_files/SocraticQuestioning2006.pdf)
- [83] Clayton Christensen Institute. (2012). **Blended learning model definitions**. Retrieved January 15, 2014, from <http://www.christenseninstitute.org/blended-learning-model-definitions/#sthash.b1BXE2sv.dpuf>
- [84] Educause. (2014). **What is blended learning?** Retrieved January 15, 2014, from <http://www.educause.edu/library/blended-learning>
- [85] Tucker, C.R. (2013). The basics of blended instruction. **Technology-Rich Learning**, 70(6), 57-60.
- [86] Pankin, J., Roberts, J. and Savio, M. (2012). **Blended learning at MIT**. Retrieved January 15, 2014, from [http://web.mit.edu/training/trainers/resources/blended\\_learning\\_at\\_mit.pdf](http://web.mit.edu/training/trainers/resources/blended_learning_at_mit.pdf)
- [87] Rothrauff, L. (2011). **What is it and why try it?** Retrieved January 15, 2014, <http://ets.berkeley.edu/article/blended-learning-what-it-and-why-try-it>
- [88] The Glossary of Education Reform. (2013). **Blended learning**. Retrieved January 15, 2014, from <http://edglossary.org/blended-learning/>
- [89] Kim, A. and Thomson, M. (2013). **Fundamentals of blended learning**. Retrieved January 30, 2014, from <http://www.youtube.com/watch?v=3xMqJmMcME0>
- [90] Bhashkar, S.J. (2013). **Different forms of blended learning in classroom**. Retrieved February 15, 2014, from <http://edtechreview.in/trends-insights/trends/562-different-forms-of-blended-learning-in-classroom>
- [91] Straus, S.G. (2013). **Enhancing critical thinking skills for army leaders using blended-learning methods**. Retrieved January 30, 2014, from [http://www.rand.org/content/dam/rand/pubs/research\\_reports/RR100/RR172/RAND\\_RR172.pdf](http://www.rand.org/content/dam/rand/pubs/research_reports/RR100/RR172/RAND_RR172.pdf)
- [92] Bailey, J., Ellis, S., Schneider, C. and Vander Ark, T. (2013). **Blended learning implementation guide**. Retrieved January 30, 2014, from <http://net.educause.edu/ir/library/pdf/CSD6190.pdf>



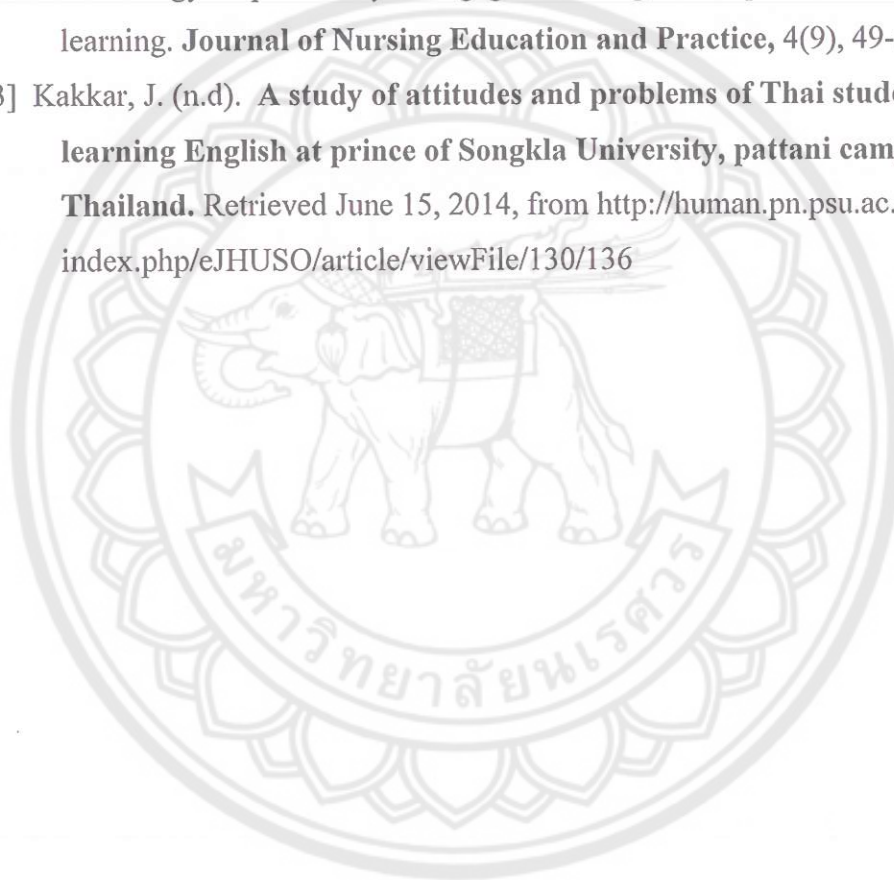
- [93] Bersin, J. (2012). **Learning leaders 2012: Lessons from the best**. Retrieved January 30, 2014, from <http://www.bersin.com/News/Content.aspx?id=15215>
- [94] Donata, F., Mebane, M., Porcelli, R., Attanasio, C. and Pulino, M. (2007). Developing professional skills and social capital through computer supported collaborative learning in university contexts. **International Journal of Human-Computer Studies**, 65(2), 140-152.
- [95] University of Cambridge. (2010). **What is blended learning**. Retrieved February 15, 2014, from [https://www.teachers.cambridgeesol.org/ts/digitalAssets/116069\\_Blended\\_Learning\\_FAQs\\_Nov10.pdf](https://www.teachers.cambridgeesol.org/ts/digitalAssets/116069_Blended_Learning_FAQs_Nov10.pdf)
- [96] Velenchik, A. (2010). **Teaching with the case study**. Retrieved February 15, 2014, from <http://serc.carleton.edu/sp/library/cases/index.html>
- [97] National Council for Excellence in Critical Thinking. (2013). **Critical thinking**. Retrieved May 2, 2014, from <http://www.criticalthinking.org/pages/the-national-council-for-excellence-in-critical-thinking/406>
- [98] Greenstein, L. (2012). **Assessing 21st century skills: A guide to evaluating mastery and authentic learning**. California: SAGE.
- [99] Institute of Museum and Library Services, U.S.A. (ILMS). (n.d.). **21<sup>st</sup> century skills**. Retrieved May 30, 2014, from [http://www.imls.gov/about/21st\\_century\\_skills\\_list.aspx](http://www.imls.gov/about/21st_century_skills_list.aspx)
- [100] National Research Council (USA). (2010). **Assessing 21<sup>st</sup> century skills**. Washington, DC: The National Academies.
- [101] Liakakos, A. (2013). **Little by little, classroom doors become revolving doors**. Retrieved June 24, 2014, from <http://learningforward.org/docs/leading-teacher/leadingteacherwinter2013.pdf?sfvrsn=2>
- [102] Ferguson, R.F. (2010). **Student perceptions of teaching effectiveness: Discussion brief, MA: National center for teacher effectiveness and the achievement gap initiative**. N.P.: Harvard University.
- [103] Burnard, P. (1999). Carl Rogers and postmodernism: Challenged in nursing and health sciences. **Nursing and Health Sciences**, 1(5), 241-247.
- [104] O'Sullivan, M. (2003). The reconceptualisation of learner-centred approaches: A Nambian case study. **International Journal of Educational Development**, 24(6), 585-682.

- [105] Collins, J.W. and O'Brien, N.P. (2003). **Greenwood dictionary of education**. Westport, CT: Greenwood.
- [106] Gibbs, G. (1995). **Assessing student centred courses**. Oxford: Oxford Centre for Staff Learning and Development.
- [107] Lea, S.J., Stephenson, D. and Troy, J. (2003). Higher education students' attitudes to student centred learning: Beyond 'educational bulimia'. **Studies in Higher Education**, 28(3), 321-334.
- [108] Raktham, C. (2008). **Cultures and learner behaviours: A qualitative investigation of a Thai classroom**. Retrieved June 20, 2014, from [http://wrap.warwick.ac.uk/2375/1/WRAP\\_THESIS\\_Raktham\\_2008.pdf](http://wrap.warwick.ac.uk/2375/1/WRAP_THESIS_Raktham_2008.pdf)
- [109] Bonwell, C.C. and Eison, J.A. (1991). **Active learning: Creating excitement in the classroom**. Washington, DC: George Washington University.
- [110] Huba, M.E. and Freed, J.E. (2000). **Learner-centered assessment on college campuses: Shifting the focus from teaching to learning**. N.P.: Pearson.
- [111] Wohlfarth, D. (2008). Student perceptions of learner-centered teaching. **In Sight: A Journal of Scholarly Teaching**, 3(1), 67-74.
- [112] University of Louisville. (2014). **Why focus on critical thinking?** Retrieved May 25, 2014, from <http://louisville.edu/ideastoaction/about/criticalthinking/why>
- [113] Anderson, L.W., Krathwohl, D.R., Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J. and Wittrock, M.C. (2001). **A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives**. New York: Longman.
- [114] Bloom, B.S., Engelhart, M.D., Furst, E.J., Hill, W.H. and Krathwohl, D.R. (1956). **Taxonomy of educational objectives: The classification of educational goals**. New York: David McKary.
- [115] Spitzer, Q. and Evans, R. (1997). **Heads you win: How the best companies think**. New York: Simon and Schuster.
- [116] Shugan, S.M. (2006). Editorial: Save research-abandon the case method of teaching. **Marketing Science**, 25(2), 109-115.
- [117] Phillips, F. and Vaidyanathan, G. (2004). Should case materials precede of follow lectures? **Issues in Accounting Education**, 19(3), 305-319.



- [118] Rees, W.D. and Porter, C. (2002). The use of case studies in management training and development. **Industrial and Commercial Training**, 34(1), 5-8.
- [119] Korkmaz, O. and Karakus, U. (2009). **The impact of blended learning model on students attitudes towards geography course and their critical thinking dispositions and levels**. Retrieved January 30, 2014, from <http://www.tojet.net/articles/v8i4/845.pdf>
- [120] Tucker, J.P. and Neely, P.W. (2010). **Using web conferencing and the socratic method to facilitate distance learning**. Retrieved February 15, 2014, from [http://www.itdl.org/Journal/Jun\\_10/article02.htm](http://www.itdl.org/Journal/Jun_10/article02.htm)
- [121] Cifuentes, L. and Shih, Y.D. (2001). Teaching and learning online: A collaboration between U.S. and Taiwanese students. **Journal of Research on Computing in Education**, 33(4), 456-474.
- [122] Firdywek, Y. (1999). Web-based courseware tools: Where is the pedagogy? **Educational Technology**, 39(1), 29-34.
- [123] Hopper, K.B. (2001). Is the internet a classroom? **Tech Trends**, 45(5), 35-43.
- [124] Buranapatana, M. (2006). **Enhancing critical thinking of undergraduate Thai students through dialogic inquiry**. Retrieved June 17, 2013, from <http://trove.nla.gov.au/work/25207191?selectedversion=NBD41120560>
- [125] Petchtone, P. and Sumalee, C. (2014). **The validation of web-based learning environment model to enhance cognitive skills and critical thinking for undergraduate students**. N.P.: World Conference on Educational Sciences, Procedia-Social and Behavioral Sciences.
- [126] Snyder, L.G. and Snyder, M.J. (2008). Teaching critical thinking and problem solving skills. **The Delta Pi Epsilon Journal**, 5(2), 90-99.
- [127] Barnett, R. (1997). **Higher education: A critical business**. Milton Keynes, England: Open University.
- [128] Ackerman, D.S., Gross, B.L. and Perner, L. (2003). Instructor, student, and employer perceptions on preparing marketing students for changing business landscapes. **Journal of Marketing Education**, 25(11), 46.
- [129] Kayes, C. (2006). From climbing stairs to riding waves: Group critical thinking and its development. **Small Group Research**, 37(5), 612.

- [130] Hamilton, J.G. and Klebba, J.M. (2011). Experiential learning: A course design process for critical thinking. **Academy of Educational Leadership Journal**, 1-12.
- [131] Reid, J.R. (2010). **A quantitative assessment of an application of halpern's teaching for critical thinking in a business class**. Retrieved June 17, 2013, from <http://hdl.handle.net/10843/11978>
- [132] Wilson, J. and Ganley, B. (2014). Teaching graduate health policy via technology: A pilot study of engaged learning, social presence, and blended learning. **Journal of Nursing Education and Practice**, 4(9), 49-58.
- [133] Kakkar, J. (n.d). **A study of attitudes and problems of Thai students in learning English at prince of Songkla University, pattani campus in Thailand**. Retrieved June 15, 2014, from <http://human.pn.psu.ac.th/ojs/index.php/eJHUSO/article/viewFile/130/136>







## APPENDIX A

### CRITICAL THINKING APPRAISAL 1

This practical critical thinking test will assess your ability to make inferences and assumptions and to reason logically with arguments. The test comprises the following **five** sections:

1. Inferences
2. Assumptions
3. Deductions
4. Interpreting Information
5. Arguments

Read the instructions preceding each section and answer the questions. There are a total of **40 questions** in this test and you should aim to correctly answer as many questions as you can in **40 minutes**.

Try to find a time and place where you will not be interrupted during the test.

#### Section 1: Inferences

##### Instructions:

An inference is a conclusion drawn from observed or supposed facts. For example, if someone presses a light switch but the light does not turn on, they might infer that the filament has burnt out. However inferences may or may not be correct. For example in this case, the bulb could be missing or a fuse could be blown.

The questions in this section of the test will begin with a statement of facts that must be regarded as true. After each statement you will be presented with possible inferences which might be drawn from facts in the statement. Analyze each inference separately and decide on its degree of truth.



For each inference you will be provided with 5 possible answers:

TRUE

PROBABLY TRUE

MORE INFORMATION REQUIRED

PROBABLY FALSE, and

FALSE

Select **TRUE** if you believe the inference is definitely true, i.e. it correctly follows beyond a reasonable doubt.

**PROBABLY TRUE** if, based on facts at hand, you think the inference is **PROBABLY TRUE**; that it is more likely to be true than false, but not **TRUE** beyond a reasonable doubt.

**MORE INFORMATION REQUIRED**, if you decide that there is not enough data to make a decision based on the provided facts (lack of facts).

**PROBABLY FALSE** if, based on facts at hand, you think the inference is **PROBABLY FALSE**; i.e. it is more likely to be false than true, but there is not enough evidence to suggest that it is definitely false.

**FALSE** if you think the inference is definitely **FALSE**; i.e. it must be incorrect because it misrepresents the facts provided or contradicts the facts provided in the statement.

This section starts with some example questions and answers.

Despite the economic downturn, Germany's GDP has risen more since 2002 than any other European country. In addition to this, Germany's unemployment rate in 2012 was at a record low. What are the reasons behind this economic success? The Social-Democrat government has implemented several successful reforms since 2003, resulting in the reduction of its budget deficit and liberalizing labor market rules. In addition, their German system of apprenticeships and training has helped to reduce youth unemployment; a common problem throughout Europe.

**Example Statement:**

**Example Inference 1:** Statistics suggest that in 2012 Germany had the lowest unemployment rate in its history.

True

Probably True

More Information required

Probably False

False

Correct Answer: **True**

**Explanation:** the passage states that Germany's unemployment rate was at a record low in 2012. This suggests that it is the lowest rate recorded for the country. This inference is therefore true.

**Example Inference 2:** Other European countries may be able to reduce their youth unemployment rate by following in Germany's footsteps and adopting a similar scheme of apprenticeships and training.

True

Probably True

More Information required

Probably False

False

Correct Answer: **Probably True**

**Explanation:** This inference is probably true. The passage states that the adoption of apprenticeships and youth training has helped to reduce the level of youth unemployment in Germany. We can infer that such a scheme may help to reduce youth unemployment in the rest of Europe. However, just because the scheme worked in one country does not mean the same scheme will work in every country. Therefore, it is probably true that this scheme could help reduce youth unemployment across, Europe, but we cannot be certain.



**Section 1 questions now follow.**

Although it is agreed that China is rapidly modernizing its army, there is some doubt surrounding the exact amount it is spending. The research institute 'PIPP', submits that the annual Chinese defense spending has risen from almost \$31 billion in 2000 to over \$120 billion in 2010. This figure is almost double the official figure published by the Chinese government, who fail to include other areas such as research and development in the official figure each year. In 2010, the United States government spent around \$400 billion on military defense. Based on the current level of military growth, statistics suggest that China's defense spending could overtake America's by 2030. In addition to military spending, China's army continues to enjoy the largest number of people within the ranks of its army than any other country.

**Statement One:****Choices:**

- True
- Probably True
- More Information required
- Probably False
- False

**Inference 1:** The official figures published by the Chinese government in relation to their military spending are thought to be misleading.

**Inference 2:** It is known that the Chinese government leave areas such as 'research' and 'development' from their official figures, however, this would also suggest that other areas of spending are also omitted from official figure.

**Inference 3:** The Chinese government omits several key areas from its official figures, in areas such as military spending, agriculture, human rights and law.

**Inference 4:** If there are any anomalies between the published figures on military spending and the actual figure spent, this is merely a clerical error.

**Inference 5:** In 2010 the United States of America spent less on its military defenses than the Chinese government.

Some people think that prospective employees should include a photograph with their application form. Such practice has traditionally been criticized for allowing more attractive individuals to get ahead in their career over 'plain' colleagues. However, one study demonstrates that this is, in fact, untrue. Ruffle, the creator of this study, attributes his findings to the 'dumb-blond hypothesis' - that beautiful women are thought to be unintelligent. Ruffle submits that companies would be better advised adopting the selection model employed by the Belgian public sector, where CVs are anonymous and candidate names, gender and photographs are not allowed to be included on CVs. Such a model allows the candidate to be selected on factors relevant to the role applied for.

**Statement Two:**

**Choices:**

- True
- Probably True
- More Information required
- Probably False
- False

**Inference 1:** The 'dumb-blond hypothesis' says that more attractive women are less capable of being intelligent.

**Inference 2:** The model of selecting future employees adopted by the Belgian public sector aims to reduce discrimination based on appearance and gender.

**Inference 3:** The method of selecting future employees adopted by the Belgian public sector has helped eliminate discrimination in the Belgian public sector.



## Section 2: Assumptions

### Instructions:

An assumption is something which is presupposed or taken for granted. When a person says “I will see you tomorrow”, it is taken for granted that they will be around tomorrow, and that they will not have last-minute plans which prevent them from seeing you tomorrow.

In this section, you will be provided with a number of statements. Each statement will be followed by a series of proposed assumptions. You must decide which assumptions are **logically justified** based on the evidence in the statement. If you think that the assumption is taken for granted in the statement, and is therefore logically justified, select “**Assumption Made**”. If you think that the assumption is not taken for granted in the statement, and is not logically justified, select “**Assumption Not Made**”. Remember to judge each question individually and base your responses on the statements provided.

This section starts with some **example** questions and answers.

Public sector organizations undergo organizational changes more often than private sector organizations. This change may cause a drop in employee satisfaction rates and an increase in staff turnover in public sector organizations.

### Example Statement:

**Example Assumption One:** Private sector organizations undergo organizational change.

Assumption Made

Assumption Not Made

Correct answer: **ASSUMPTION MADE**, because the statement assumes that both private and public organizations undergo organizational change and compares the two types of organization.

**Example Assumption Three:** Private sector organizations are more efficient than public sector organizations.

Assumption Made

Assumption Not Made

Correct answer: **ASSUMPTION NOT MADE**, because the statement does not make reference to the efficiencies of either public or private sector organizations. This assumption is not implicit in the statement; i.e. it is not necessary to make this assumption in order to arrive at the statement.

Section 2 questions now follow.

Monarchic nations, i.e. those with royal families, differ from republican nations in several ways. An example of this difference is that citizens of monarchic nations pay more tax than citizens of republican nations.

**Statement One:**

**Choices:**

Assumption Made

Assumption Not Made

**Assumption 1:** The governments of monarchic nations are responsible for setting tax rates on their citizens.

**Assumption 2:** Republican nations do not have a royal family.



**Assumption 3:** The only types of nation are monarchic and republican

**Assumption 4:** A monarchic nation cannot be a republican nation.

Chilean students were right in 2012 to stage protests demanding that university education in Chile should be made free.

**Statement Two:**

**Choices:**

Assumption Made

Assumption Not Made

**Assumption 1:** Some universities outside of Chile are free.

**Assumption 2:** Staging protests will influence the costs of Chilean university education.

**Assumption 3:** Chilean students cannot afford to pay fees for university education.

**Assumption 4:** Chilean students want to attend university

### Section 3: Deductions

#### Instructions:

In this section, a statement will be provided followed by a series of suggested conclusions. Here, you must take the statement to be true. After reading each conclusion underneath the statement, you must decide whether you think it follows from the statement provided. If you agree that the conclusion follows the statement, choose **CONCLUSION FOLLOWS**. However, if you do not consider the conclusion to follow, choose **CONCLUSION DOES NOT FOLLOW**. You must select your answer based on the information presented; not using general knowledge. Similarly, you are advised not to let your own opinions or prejudices influence your decisions; stick to the statements and base your judgments solely on the facts presented.

This section starts with some example questions and answers.

A poll held in May 2012 noted that British government were trusted by only two thirds of the British population. There were three reasons for this. Firstly, the government were blamed for a return to recession. Secondly, the Prime Minister was seen as out of touch and finally, all governments face midterm slumps in

#### Example Statement One:

**Example Conclusion One:** All Prime Ministers are out of touch.

Conclusion Follows

Conclusion Does Not Follow

Correct Answer: **Conclusion does not follow**

Explanation: We cannot conclude that all Prime Ministers are out of touch on the basis that one was or might have been. The correct answer is therefore the conclusion does not follow.



**Example Conclusion Two:** All Prime Ministers who are seen as out of touch will drop in popularity.

Conclusion Follows

Conclusion Does Not Follow

**Correct Answer: Conclusion does not follow**

**Explanation:** We cannot conclude that all Prime Ministers who are out of touch will drop in popularity. We have heard about one case of a Prime Minister losing popularity by being seen as, amongst other things, out of touch. We cannot necessarily extend this link to all Prime Ministers. The correct answer is therefore conclusion does not follow.

**Section 3 questions now follow.**

In an attempt to cut expense, an organization disbanded its IT department and outsourced its IT function to a Business Process outsourcing company. In doing so, the company has managed to save 20% on its IT expenditure.

**Statement One:**

**Choices:**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** Outsourcing functions to Business process outsourcing companies will cut expenses.

**Conclusion Two:** The aim of this company's outsourcing was to make the organization more profitable.

**Conclusion Three:** The outsourced IT function has saved the organization 1/5<sup>th</sup> on their IT function expenditure compared to the in-house IT function.

Sarah owns a new company. New companies are more likely to fail than well-established companies. Therefore:

**Statement Two:**

**Choices:**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:**

Sarah's company will fail.

**Conclusion Two:** Sarah's company is more likely to fail than a well-established company.

**Conclusion Three:** Well-established companies are more likely to succeed than new companies

Facebook was launched on the American stock market in 2012. However, statistics suggests that several previously high-performing companies, such as Pandora, Groupon and LinkedIn fell in value after they were launched on the American stock market. Therefore:

**Statement Three:**

**Choices:**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** It is possible that Facebook will also drop in value after May 2012.

**Conclusion Two:** Social networking sites perform badly once they become publicly listed on the stock market.



## Section 4: Interpreting Information

### Instructions:

The following questions will consist of a passage of information, followed by a series of conclusions. You are instructed to assume all information in the passage is true. The task is to judge whether or not each of the proposed conclusions logically flows beyond a reasonable doubt from the information given in the paragraph.

If you think that a conclusion follows beyond a reasonable doubt (but perhaps not absolutely), select “**Conclusion Follows**”. If you think the conclusion does not follow beyond a reasonable doubt based on the facts given, select “**Conclusion Does Not Follow**”. Do not use general knowledge when answering, only use the information provided in the passage. Remember to judge each conclusion individually.

This section starts with some example questions and answers.

Elaine is an events planner for a company called Top London Events. She specializes in themed parties and caters to London’s young professionals. Elaine is also the most popular member of staff at Top London Events. Therefore:

### Example Statement:

**Example Conclusion One:** Elaine is the most professional party planner.

Conclusion Follows

Conclusion Does Not Follow

**Correct Answer: Conclusion does not follow.**

**Explanation:** Based on the information provided in the statement, we cannot know whether or not Elaine is ‘professional’. This topic is not addressed by the statement, just that she is “sought after”. The correct answer is therefore, conclusion does not follow.

**Example Conclusion Two:** People at Top London Events are more likely to want to work with Elaine than other employees.

Conclusion Follows

Conclusion Does Not Follow

**Correct Answer: Conclusion follows.**

**Explanation:** The statement notes that Elaine is the most popular member of staff. So is she is the most popular it is more likely than not that people will want to work with her more than any other member of staff. The correct answer is therefor, conclusion follows.

**Section 4 questions now follow.**

The British National Library has the largest collection of publicly-owned books in the United Kingdom. Therefore:

**Statement One:**

**Choices**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** There might be a larger collection of books in the United Kingdom.

**Conclusion Two:** There might be a larger collection of publicly-owned books in the United Kingdom.

**Conclusion Three:** The British National Library is in the United Kingdom.



People with master's degree in business administration (MBA) earn an income on average 70% higher than people with just an undergraduate degree. MBA students from top business schools earn an income on average 50% higher than the average income of people with MBAs.

**Statement Two:****Choices**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** If a person obtains an MBA, their income will increase.

**Conclusion Two:** If a person obtains an MBA from a top business school, their income will be higher than that of the average MBA graduate.

**Conclusion One:** The average income of an MBA graduate from a top business school is over double that of the average income of a person holding only an undergraduate degree.

Hannah has been a solicitor for three years. She works for a law firm in central London and has hopes of being promoted. To be promoted in Hannah's firm, employees must have at least four years' experience practicing as a solicitor. Therefore:

**Statement Three:****Choices**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** Hannah cannot be promoted because she doesn't have enough experience.

**Conclusion Two:** We cannot know whether Hannah can be promoted or not.

## Section 5: Analyzing arguments

### Instructions:

When making decisions, it is useful to be able to distinguish between a strong argument and a weak argument. A strong argument is both important and directly related to the question. A weak argument is not directly related to the question, or is of minor importance. A weak argument may also be related to a trivial aspect of the question, or confuses correlation with causation (incorrectly assuming that because two things are related, they cause each other to happen).

In this series of questions, each question is followed by a series of arguments. For this section you must regard each argument as **true**, regardless of whether it is weak or strong.

If you consider an argument to be strong, select “**STRONG ARGUMENT**”, or if you consider an argument to be weak, select “**WEAK ARGUMENT**”. Judge each question and argument individually. Try not to take into account individual opinion or general knowledge since each argument is considered to be true.

This section starts with some example questions and answers.

Should Employers be bound by law to encourage diversity in the workplace?

### Example Question:

**Example Argument One:** Yes, encouraging diversity in the workplace will ensure a variety of opinions, promoting creativity and innovation.

Strong Argument

Weak Argument



**Correct answer:** Strong argument.

Explanation: the argument addresses the initial statement and provides a practical benefit to an employing organization, therefore providing a strong argument for the case.

**Example Argument Two:** No, workplace diversity leads to culture clashes, which makes the workplace tense and divided.

Strong Argument

Weak Argument

**Correct answer:** Strong argument.

Explanation: The argument presents a clear and practical problem with the initial statement, and addresses it directly, and is therefore a strong argument.

**Section 5 questions now follow.**

Should companies downsize their workforces to decrease expenses and maximize profits?

**Statement One:**

**Choices**

Strong Argument

Weak Argument

**Argument One:** Yes, downsizing will protect the company from bankruptcy in hard economic times.

**Argument Two:** Yes, companies have no obligation to employ more people than it can handle.

**Argument Three:** No, downsizing leads to demoralization of the workforce and causes a drop in employee productivity.

**Argument Four:** Yes, companies which have no control over the size of their workforce will be highly vulnerable to economic climates and market changes

Should banks and financial institutions be obligated to engage in socially-responsible investing?

### Statement Two:

#### Choices

Strong Argument

Weak Argument

**Argument One:** Yes, engaging in socially responsible investing leads to a happier and more fulfilled workforce compared to banks which do not engage in socially-responsible investing.

**Argument Two:** No, banks are for-profit institutions and have no obligation to social issues.

**Argument Three:** No, focusing on social responsibility detracts from the aim of making money, which is the most important endeavor for banks, and leads to a decrease in revenue and profit.

**Argument Four:** No, over-regulation in the financial sector leads to decreased opportunities and therefore lower profits.

----END OF TEST----



## APPENDIX B

### DOCTORAL RESEARCH PROJECT PARTICIPANTS' INFORMATION

**Research Title:** Blended Socratic Method of Teaching (BSMT): An Instructional Model to Enhance the Critical Thinking Skills of Undergraduate Business Students

**Statement of Willingness to Join the Research:** The student voluntarily participates in a doctoral research being conducted by Eugenia A. Boa under the supervision of Assistant professor Dr.Amornrat Wattanatorn and Associate Professor Dr.Kanchit Tagong.

**Purpose:** The purpose of this study is to develop an instructional model to enhance the critical thinking skills of undergraduate business students.

**Procedures:** The procedures involve taking part in the implementation of the instructional model for a total of 30 hours in ten consecutive weeks and taking two tests (pre and post-test) to assess the students' critical thinking skill. The student will take the test at the beginning and then again at the end of ten weeks for a total testing period of 80 minutes. A satisfaction survey will be administered too at the end of ten weeks for a total of 60 minutes.

**Confidentiality:** All information collected in this study is confidential. The data provided by the student will be treated in strict confidentiality and the name or identity of the students will not be revealed.

**Risks:** There are no risks involved in participating in this study.

**Benefits, Freedom to Withdraw, and Ability to Ask Questions:** The study is designed to help students personally in enhancing their critical thinking skills. The students are free to ask questions or withdraw from participation at any time.

Contact Information of Investigators:

Eugenia A. Boa  
Naresuan University International College  
Thapo, Muang, Phitsanulok 65000  
eugeniab@nu.ac.th

0920321310  
Assistant Professor Dr.Amornrat Wattanatorn  
Faculty of Education Naresuan University  
amornrat2001@yahoo.com

Associate Professor Dr.Kanchit Tagong  
Faculty of Humanities Naresuan University  
kanchitt@nu.ac.th

## DOCTORAL RESEARCH PROJECT

### PARTICIPANTS' INFORMATION

**Research Title:** Blended Socratic Method of Teaching (BSMT): An Instructional Model to Enhance the Critical Thinking Skills of Undergraduate Business Students

**Statement of Willingness to Join the Research:** The student voluntarily participates in a doctoral research being conducted by Eugenia A. Boa under the supervision of Assistant Professor Dr.Amornrat Wattanatorn and Associate Professor Dr.Kanchit Tagong.

**Purpose:** The purpose of this study is to develop an instructional model to enhance the critical thinking skills of undergraduate business students.

**Procedures:** The procedures involve taking a critical thinking test. The student will take the test at the beginning of the semester for a total testing period of 40 minutes.

**Confidentiality:** All information collected in this study is confidential. The data provided by the student will be treated in strict confidentiality and the name or identity of the students will not be revealed.

**Risks:** There are no risks involved in participating in this study.

**Benefits, Freedom to Withdraw, and Ability to Ask Questions:** The study is not designed to help students personally but to help investigator in developing an instructional model to enhance critical thinking skills. The students are free to ask questions or withdraw from participation at any time.

Contact Information of Investigators:

Eugenia A. Boa

Naresuan University International College

Thapo, Muang, Phitsanulok 65000

eugeniab@nu.ac.th

0920321310

Assistant Professor Dr.Amornrat Wattanatorn

Faculty of Education Naresuan University

amornrat2001@yahoo.com

Associate Professor Dr.Kanchit Tagong

Faculty of Humanities Naresuan University

kanchitt@nu.ac.th



**DOCTORAL RESEARCH PROJECT****Blended Socratic Method of Teaching (BSMT): An Instructional Model to  
Enhance the Critical Thinking Skills of Undergraduate Business Students****INFORMED CONSENT FORM**

I ..... (the participant), declare that I

1. Willingly volunteered to participate in the study;
2. Am aware of the purpose of the study;
3. Understand that I am free to withdraw from the study at any time;
4. Am aware that all information relating to my participation in the study will be treated 'in confidence';
5. Agree to information collected about me being used in the study, and published;
6. Wish to remain anonymous in the study's report of findings.

Signature.....Date .....

Name:.....

Contact telephone number:.....

## APPENDIX C

**Percentile Ranks of Total Raw Scores for Occupations**

Raw Score	Industry/ Occupation
	Professional/Business
40	99
39	99
38	95
37	88
36	76
35	67
34	56
33	52
32	46
31	37
30	33
29	29
28	26
27	20
26	16
25	13
24	12
23	9
22	8
21	6
20	5
19	3
18	3
17	2
16	2



Raw Score	Industry/ Occupation
	Professional/Business
15	1
14	1
<b>13*</b>	<b>1</b>
12	1
11	1
10	1
9	1
8	1
7	1
6	1
5	1
4	1
3	1
2	1
1	1
0	1
Raw Score Mean	31.9
Raw Score <i>SD</i>	5.6
<i>N</i>	153

**Source:** Watson, G. and Glaser, E.M., 2008

\* The overall raw score of the business students was **13.26** and the percentile fall within **10 percentile and below** which is interpreted as “well below average”.

## APPENDIX D

### List of Experts who Reviewed and Validated the BSMT

Experts who reviewed the Blended Socratic Method of Teaching of Teaching (BSMT) model.

#### 1. Assistant Professor Dr.Wareerat Kaewurai

1) Degree	Major	Institute
B.A.	Bachelor in Science Education	Shinakaranwirot University, Phitsanulok
M.A.	Science Education	Chiang Mai University
Ph.D.	Curriculum and Instruction	Chulalonglorn University
2) Year of teaching experience in higher education		More than 10 years

#### 2. Associate Professor Dr.Mary Sarawit

1) Degree	Major	Institute
B.A.	History	Seton Hill College, U.S.A
M.A.	Linguistics	University of Michigan, U.S.A
Ph.D.	Linguistics	University of Michigan, U.S.A
2) Year of teaching experience in higher education		More than 10 years

#### 3. Associate Professor Dr.Pornchulee Achava-Amrung

1) Degree	Major	Institute
B.A.	International Relations	Indiana University, U.S.A
M.S.	Educational Psychology	University of Southern California
Ed. D.	Higher Education Administration	Indiana University, U.S.A
Post Doc	Testing and Measurement	Cambridge University, U.K.
2) Year of teaching experience in higher education		More than 10 years



#### 4. Assistant Professor Dr.Sudsuang Yutdhana

1) Degree	Major	Institute
M.A.	Literacy Education	Washington State University, USA
M.A.	English	Naresuan University, Thailand
Ph.D.	English Language Studies	Surananee University of Technology, Thailand
2) Year of teaching experience in higher education		More than 10 years

#### 5. Associate Professor Dr.Clement Albert Trahan

1) Degree	Major	Institute
B.Sc.	Secondary Education	Old Dominion University, U.S.A.
M.Sc.	Hospitality and Tourism Management	Florida International University, Miami, U.S.A.
Pd.D.	Educational Methodology	Armstrong University, Oakland, California, U.S.A.
TESOL certificate	TEFL International U.K.	London, Great Britain, U.K.
2) Year of teaching experience in higher education		More than 10 years

## APPENDIX E

### EVALUATION OF THE BLENDED SOCRATIC METHOD OF TEACHING (BSMT): AN INSTRUCTIONAL MODEL TO ENHANCE THE CRITICAL THINKING SKILL OF UNDERGRADUATE BUSINESS STUDENTS

The objective of this evaluation form is for experts to evaluate the appropriateness of the instructional model. The evaluation form consists of two parts:

Part 1: Evaluation of the appropriateness of the BSMT Model in the enhancement of the business students' critical thinking skill.

Part 2: Evaluation of the components of the BSMT Model in the enhancement of students' critical thinking skill.

**Directions:** Please tick ✓ in the box that best represents your professional views for each question. The instructional model shall be evaluated using a Likert scale consisting of 5 levels as follows:

- 5 - Highly Appropriate
- 4 - Appropriate
- 3 - Neutral
- 2 - Less Appropriate
- 1 - Least Appropriate

Please reflect upon your experience and mark the box which represents your level of agreement or disagreement. You may add comments for each question.



### Part 1: Appropriateness of the BSMT Model

Items	Levels					Comments
	5	4	3	2	1	
<b>1. Overview of the BSMT Model</b>						
1.1 The clarity in elaborating or explaining the overview of developing the instructional model.						
1.2 The instructional model stated the statement of necessity of enhancing the critical thinking skill of undergraduate business students.						
1.3 The background and rationale why the model is to be developed.						
1.4 The usage of language in the composition of the overview of the instructional model is consistent, so that one can understand clearly the overview and focus of the model.						
<b>2. Background Concept in Developing the BSMT Model</b>						
2.1 The clarity in explaining the background concept used in developing the instructional model.						
2.2 The application of the concept in developing the instructional model.						
2.3 The usage of language in explaining the concept is consistent and clear.						
<b>3. Principles of BSMT Model</b>						
3.1 The principles are clear and show the focus of the instructional model.						
3.2 The focus of the instructional model can be the framework for identifying other components.						

Items	Levels					Comments
	5	4	3	2	1	
3.3 The principles of the model are reasonable.						
3.4 The usage of language and order of the principles are consistent and easy to understand.						
3.5 The principle of the model is in accordance with the social context.						
<b>4. Objectives</b>						
4.1 The statement of the capability of being a business student is clear.						
4.2 The purpose of the instructional model is important and critical to business students' profession in the future.						
4.3 The instructional model is practically applicable.						
<b>5. Content</b>						
5.1 The contents cover the areas that are needed for the instructional model.						
5.2 The order of the content is sequential.						
5.3 It is appropriate and useful for students.						
<b>6. Learning and Teaching Process</b>						
6.1 The clarity of the learning and teaching process embodied by BSMT model.						
6.2 The learning and teaching process is practically applicable.						
6.3 The learning and studying activities are in appropriate order.						
6.4 Time or class duration is appropriate.						
6.5 The instructional model is appropriate for business students.						



Items	Levels					Comments
	5	4	3	2	1	
<b>7. Measurement and Evaluation</b>						
7.1 The appropriateness of the criteria for evaluation.						
7.2 The measurement criteria are useful and applicable.						
7.3 They cover the objectives of the instructional model.						

**Other Comments:**

.....

.....

.....

.....

.....

.....

**Part 2: Conformity of the Components of the BSMT Model**

Items	Levels					Comments
	5	4	3	2	1	
1. The conformity of the principles and objectives of the instructional model.						
2. The conformity of the principles and the content of the model.						
3. The conformity of the principles and the learning process of the model.						
4. The conformity of the principles and the measurement and evaluation of the model.						

Items	Levels					Comments
	5	4	3	2	1	
5. The conformity of the objectives and content of the model.						
6. The conformity of the objectives and the teaching and learning process of the model.						
7. The conformity of the objectives and the measurement and evaluation of the model.						
8. The conformity of the content and the learning and teaching process.						
9. The conformity of the content and the measurement and evaluation of the model.						
10. The conformity of the learning and teaching process and the measurement and evaluation of the model.						

**Other Comments:**

.....

.....

.....

.....



## **APPENDIX F**

### **EVALUATION OF GUIDELINES ON HOW TO USE THE BLENDED SOCRATIC METHOD OF TEACHING (BSMT) MODEL TO ENHANCE THE CRITICAL THINKING SKILL OF UNDERGRADUATE BUSINESS STUDENTS**

The objective of this evaluation form is for experts to evaluate the appropriateness of the guidelines in using the BSMT model. The evaluation form consists of two parts:

Part 1: Evaluation of the appropriateness of the BSMT model in instruction. Each component of the model will be considered in determining its appropriateness.

Part 2: Evaluation of the appropriateness of the lesson plan. Each component of the lesson plan will be considered in determining its appropriateness.

**Directions:** Please tick ✓ in the box that best represents your professional views for each question. The instructional model shall be evaluated using a Likert scale consisting of 5 levels as follows:

- 5 - Highly Appropriate
- 4 - Appropriate
- 3 - Neutral
- 2 - Less Appropriate
- 1 - Least Appropriate

Please reflect upon your experience and mark the box which represents your level of agreement or disagreement. You may add comments for each question.

Thank you for your help!

**Part 1: How to use the BSMT Model**

Items	Levels					Comments
	5	4	3	2	1	
1. The details on how to use the model is clear to apply it effectively.						
2. The procedure in studying the documents before teaching shows the expected result.						
3. The details in the instruction include the information about the preparation of the teaching materials necessary for conducting activities.						
4. The overview of the measurement and evaluation is clear.						
5. The summary of the requirements to be prepared in the measurement and evaluation is clear and easy to prepare.						
6. The statement about grading is clear and easy to understand.						
7. The suggestions in terms of student and teacher's role in teaching and learning are clear and applicable.						

**Other Comments:**

.....

.....

.....

.....

.....



## Part 2: Evaluation of the Appropriateness of the Lesson Plan

Items	Levels					Comments
	5	4	3	2	1	
<b>1. Determinants (Overview) of the Components of the Lesson Plan</b>						
1.1 The components of the teaching plan are comprehensive and cover the necessary requirements.						
1.2 The order / sequence of the components of the lesson plan are appropriate and easy to understand.						
1.3 There is conformity among the components of the teaching plan.						
1.4 The topic of the lesson plan is appropriate.						
1.5 The language use in the lesson is clear and easy to understand.						
<b>Components of the Lesson Plan</b>						
<b>1. Important Concepts</b>						
1.1 The concepts used are appropriate and reflects the significance of the lesson plan.						
<b>2. Objectives</b>						
2.1 The objectives of the lesson plan conform to the objectives of the instructional model.						
2.2 The objectives are clear and reflect the learning outcome expected to occur to the students.						
2.3 The objectives are practically applicable.						
<b>3. Content</b>						
3.1 The content conforms to the objectives of the instructional model and can lead to the achievement of the objectives set forth.						
3.2 The content is appropriate for the students / learners.						

Items	Levels					Comments
	5	4	3	2	1	
<b>4. Learning and Teaching Activities</b>						
4.1 The steps in conducting activities are in appropriate order.						
4.2 The determinants of each activity in each step are clear and easy to understand.						
4.3 During the activities, students are given the opportunity to participate.						
4.4 The content conforms to the teaching and learning process of the model.						
4.5 The period in conducting the activity is appropriate.						
<b>5. Measurement and Evaluation</b>						
6.1 The measurement and evaluation conform to the objectives of the BSMT model.						
6.2 The measurement and evaluation are in accordance with the lesson plan.						
6.3 The instructional model is appropriate with the skill (critical thinking) of students to be measured.						
6.4 The students can participate/perform effectively what is required in the measurement and evaluation.						
6.5 The preparation of the instrument to be used in measurement and evaluation is clear and easy to use.						

**Other Comments:**

.....

.....

.....

.....

.....



## APPENDIX G

### Taro Yamane Table 2

Sample size for  $\pm 5\%$ ,  $\pm 7\%$  and  $\pm 10\%$  Precision Levels Where Confidence Level is 99% and  $P=5$ .

Size of Population	Sample Size (n) for Precision (e) of:		
	$\pm 5\%$	$\pm 7\%$	$\pm 10\%$
100	81	67	51
125	96	78	56
150	110	86	61
175	122	94	64
200	134	101	67
225	144	107	70
250	154	112	72
275	163	117	74
300	172	121	76
325	180	125	77
350	187	129	78
375	194	132	80
400	201	135	81
425	207	138	82
450	212	140	82

## APPENDIX H

### BLENDed SOCRATIC METHOD OF TEACHING (BSMT)

#### A How-To Guide: Guidelines for Using the Model

Eugenia Azaro Boa

#### Contents

How to Use the Guide.....	234
Part I – Overview of the Model.....	235
1.1 Components of the Blended Socratic Method of Teaching (BSMT) Model.....	236
Part II – How to Use the Model.....	237
2.1 Model Implementation.....	237
2.2 Standard Criteria in Using the BSMT Model.....	242
2.3 Mechanics before Using the BSMT Model.....	243
2.3.1 Study Relevant Documents.....	243
2.3.2 Procedure in the Preparation of Teaching Materials.	243
2.4 Measurement and Evaluation Using the BSMT Model...	244
2.5 Guidelines in Teaching.....	245
2.5.1 Role of the Instructor (Socratic Teacher).....	245
2.5.2 Role of the Student (Interlocutor).....	246
Part III – Lesson Plan.....	245
3.1 Course Syllabus.....	259
3.2 Case Study.....	264
3.3 Evaluation Tools: Quiz and Class Cards.....	279





# **BLENDED SOCRATIC METHOD OF TEACHING (BSMT)**

## **A How-To Guide: Guidelines for Using the Model**

### **How to Use this Guide**

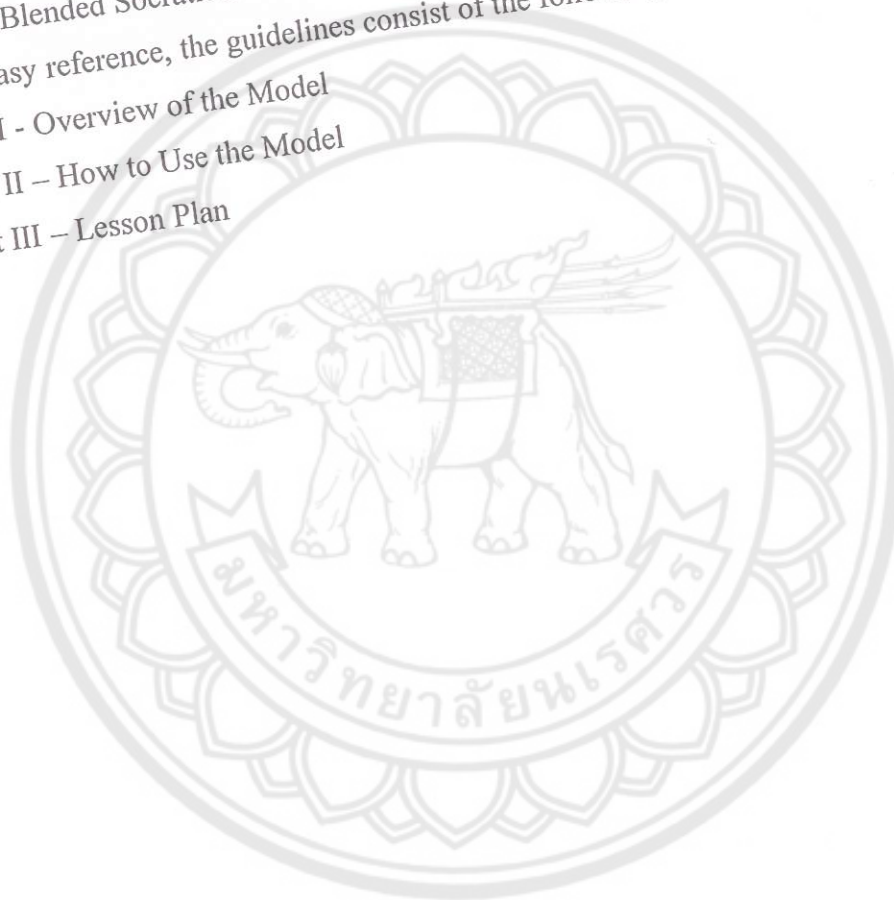
This guideline provides a step by step process in using and implementing effectively the Blended Socratic Method of Teaching (BSMT) model.

For easy reference, the guidelines consist of the following:

Part I - Overview of the Model

Part II – How to Use the Model

Part III – Lesson Plan



## PART I: OVERVIEW OF THE BSMT MODEL

Blended Socratic Method of Teaching (BSMT) model is designed to specifically enhance critical thinking skills of undergraduate business students and likewise introduce a new pedagogy of teaching. Its components: syntax, principles of reaction, the social system, support system, and application are adapted from the works of Bruce R. Joyce, Marsha Weil and Emily Calhoun (2009).

Among other skills, employers are looking for graduates who can problem-solve and who can use “higher level thinking” (AMA, 2010). Higher education and lecturers want their students to move from “surface-level” learning to “deep learning,” which is a facet of being a lifelong learner (Baker College, 2009). The BSMT model focuses on enhancing critical thinking skills by intentionally challenging the students to do more than just recall facts and figures. No boss will ever require his/her employee to complete a multiple-choice task.

The main objective of the model is to address the deficient critical thinking skills of undergraduate business students, particularly to enhance the following skills: recognize assumptions (the ability to separate fact from opinion), evaluate arguments (the ability to analyze information objectively and accurately and questioning the quality of supporting evidence), and draw conclusions (the ability to bring diverse information together to arrive at conclusions, that logically follow from available evidence). The elements of the critical thinking were developed by Pearson Education, Inc. (2012). The mentioned skills are indispensable in both personal life and business.

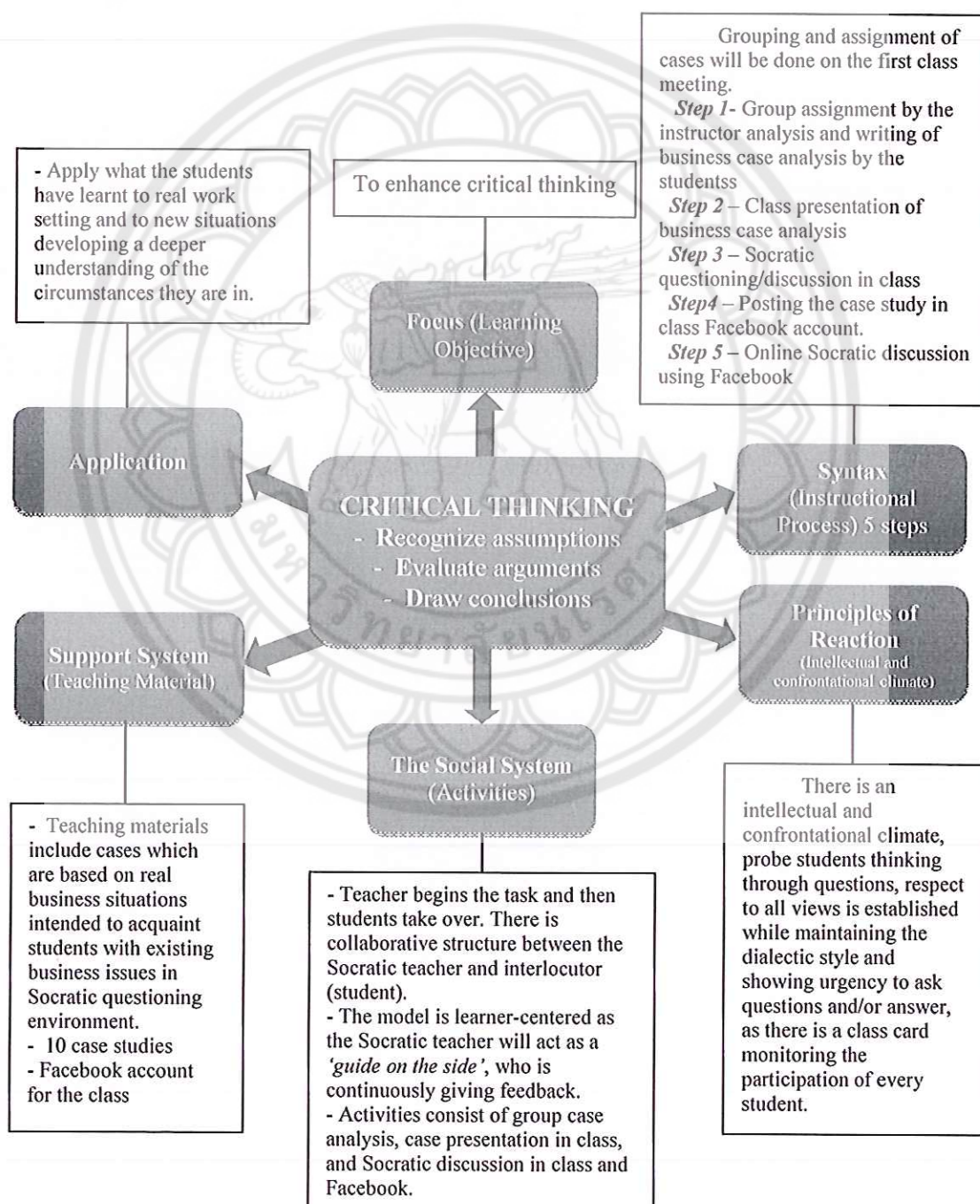
The learners in this model include undergraduate students (adult learners) in the field of business. This model can be used effectively in small or large groups without added cost but time.



## The BSMT Model

### COMPONENTS OF BLENDED SOCRATIC METHOD OF TEACHING (BSMT) MODEL

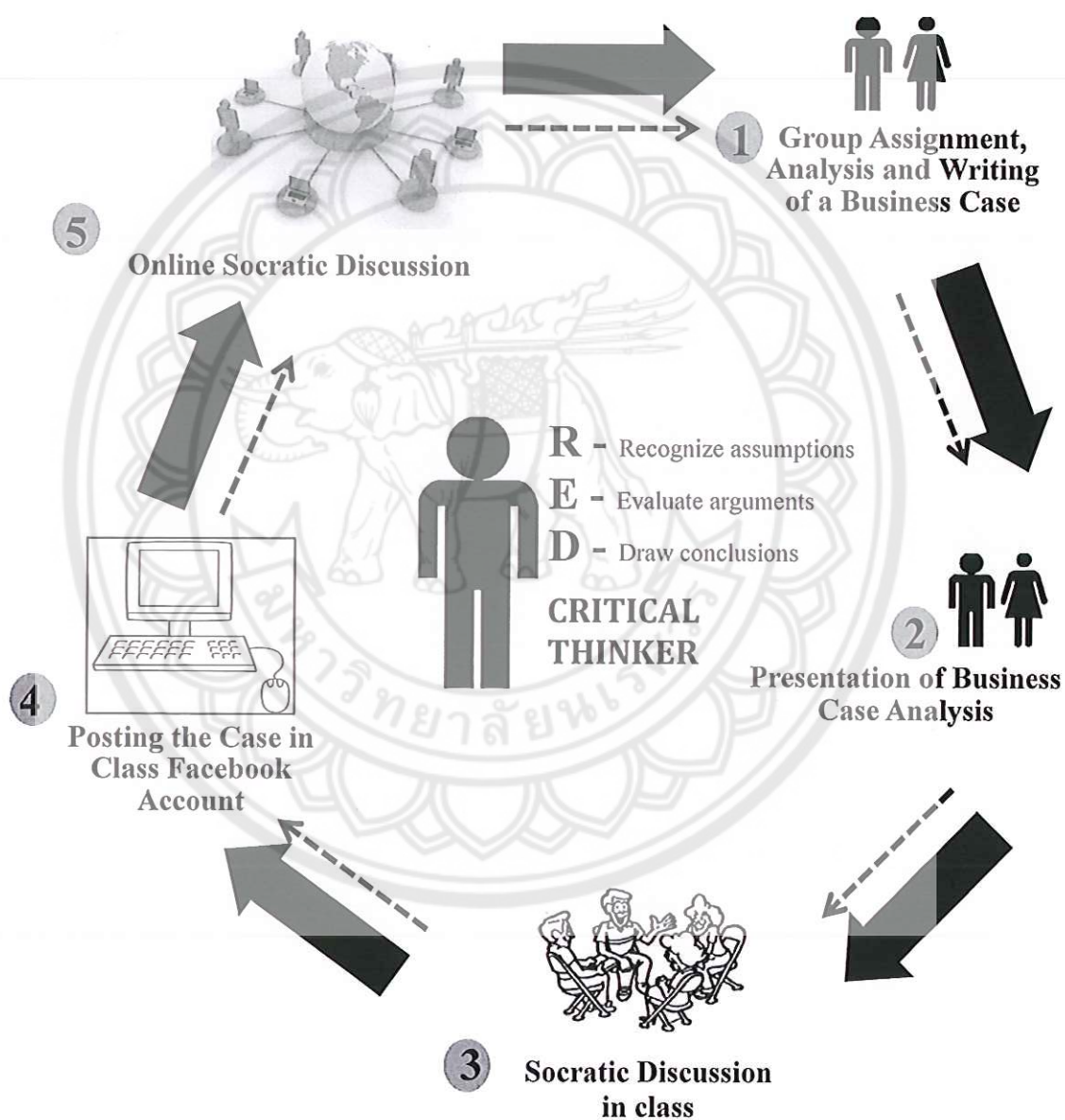
This model is based on the conception that a classroom and online interaction are a miniature business organization, where stakeholders have to deal with issues that conflict with one another. Resolving complex, controversial issues within the context requires critical thinking. In order to fulfill the role of an interlocutor (student), three skills are required: recognizing assumptions, evaluating arguments and drawing conclusions.



## PART II: HOW TO USE THE MODEL

*The components of the teaching model are adapted from Joyce, Weil and Calhoun (2009).*

### Blended Socratic Method of Teaching (BSMT) for Undergraduate Business Students: Steps Explained



**BSMT Model**



To better understand the Blended Socratic Method of Teaching (BSMT) Model for undergraduate business students, the implementation of the model is discussed in detail below. Each stage is further subdivided into sub-stages or activities.

Pre-grouping of class and pre-assignment of cases shall take place at the first class meeting.

### **Step 1: Group Assignment, Analysis and Writing of a Business Case Analysis**

This stage is further subdivided into different activities namely:

1. Students will be grouped into three to four people at the first class meeting. Students are free to choose who will be in their group.
2. The cases will be assigned to each group and they can choose the case that they would like to present. Cases will be limited only to the list provided in class.
3. The date of the case presentation will be assigned and announced at the first class meeting.
4. The group will start analyzing the case assigned.

The case analysis will be written according to the prescribed format.

#### **Procedure of the Business Case Analysis**

In writing the business case analysis, the steps below will be complied with. All the steps involved seek to enhance the critical thinking skill of students. The case study will be used as an integral tool/activity that provides the support system in enhancing critical thinking skill.

#### **1. Case assignment to a group of four students**

As mentioned above, students working in a group promote active learning according to SERC, Carlton College (2010). Through that, students become more engaged with the material (business case study), and prepare to work collaboratively with the other members of the group.

#### **2. Identify the case objective/s**

In this step, in order to identify the case objectives, the students have to understand clearly the facts presented in the case. Here, students develop the ability to separate fact from opinion (recognize assumptions) as they have to identify specifically the goals in doing the case study, which will later on set the direction of understanding and solving the problem/s involved in the case.

### **3. Identify the problem/s**

The case problem/s is/are directly connected to the case objectives initially identified by the students. As important as identifying the case objectives, students likewise develop their recognition of assumptions by segregating facts from opinions presented in the case.

### **4. State the facts and nature of the case, including the facts of the case, characters, incidents, and other important information.**

In this step, after the students analyze the case in detail, the case will be digested and the characters, incidents or events as well as other important information will be written bearing in mind the case objectives and problems priorly identified. Recognizing assumptions and evaluating arguments are clearly enhanced among students. Likewise, the students could have a hint as well of deciding the course of action.

### **5. Identify alternative courses of action**

Here, the students will identify several alternative courses of action that they may choose from to solve the problems involved in the case. There is no limit to the number of the alternatives; however, only one alternative will not be allowed. The advantages and disadvantages of each alternative will be identified. Evidently, all the essential key elements of the RED model of critical thinking are present in this step: recognizing assumptions, evaluating arguments, and drawing conclusions.

### **6. Conclusion and recommendation**

This step will require students to choose the best alternative course of action. The alternative chosen will be discussed as regards to its advantages and disadvantages. Students will likewise suggest some actions in order to lessen the effects of the disadvantages identified.

After choosing the best alternative course of action, students will sum-up the case by stating recommendations about the case.

The students develop in this stage the ability to decide the course of action (drawing conclusion) which is one of the essential elements of enhancing the critical thinking skill.

The students are encouraged to consult with the instructor during the case analysis stage.



**Step 2: Presentation of Business Case Analysis**

During the presentation of the case, students are required to comply with the following:

1. Students shall prepare a PowerPoint presentation.
2. The presenters shall provide a hard copy of the case analysis to the instructor.
3. Those who are not presenting shall pay close attention to the presentation.
4. The first part of the presentation is the facts of the case: nature of the case, character, events/incidents, and other important facts.
5. Discuss issues and problems.
6. Present an alternative course of action.
7. Answer the problems.
8. State the conclusion.

**Step 3: Socratic Discussion in Class**

The instructor has a class card for each student where the title of the case and the week number is written. The student will be called by random using the card. Then the questioning starts.

During this stage, the following are the sub-stages/activities:

1. The instructor/student asks probing questions.
2. The presenter /student / instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.
3. The members of the class evaluate the questions and provide more arguments and probing questions.
4. The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.

**Step 4: Posting the Case in the Facebook account of the class**

After the case presentation and class discussion, the instructor shall post the case analysis to the Facebook account named "Blended Socratic Method of Teaching."

It must be noted that all the students are required to be in the Facebook account created specifically for the class.

### **Step 5: Online Socratic Discussion**

It involves the following sub-steps/activities:

1. The instructor will post a summarized version of the case on the Facebook account.
2. Students will be instructed to post their questions and/or answers. The instructor will continuously monitor and ask probing questions of students but will not give answers.
3. The instructor/student asks probing questions.
4. The presenter/student/instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.
5. The members of the class evaluate the questions and provide more arguments and probing questions.
6. The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.

There is no specific period of time to finish the discussion for each case. Students can go back to the previous case to post comments/answer even a new case has been posted.

#### **Instructor's Feedback**

The instructor will act as the facilitator and will join the discussion. The instructor ask questions which will help in generating more inquiries for the discussion until reaching the answer to questions. The instructor will maintain the status as a "guide on the side."

### **Standard Criteria in Using the BSMT Model**

#### **1. What do the learners have to learn?**

Upon using the model, the learners are expected to enhance their abilities in recognizing assumptions, evaluating arguments, and drawing conclusions which will be indispensable in their profession and personal life.

#### **2. Who are the learners?**

The model is primarily designed for adult learner and undergraduate business students who have deficient critical thinking skills or learners who needs to enhance their critical thinking skill.



**3. What is the setting? How many learners? How many resources can you use?? Is the design "industrial" (i.e., a canned product) or can it be dynamically changed?**

The setting shall be classrooms and anywhere where students can access the Internet and log in to their Facebook account. It is cost effective as Facebook is free. The model can be used in small or large groups, and the model can be dynamically changed depending on the instructor.

### **Mechanics on Preparation before Using the BSMT Model**

#### **1. Study Relevant Documents**

1.1 Study the Blended Socratic Method of Teaching (BSMT) model (page 3) to enhance the critical thinking skills of undergraduate business students.

1.2 Study the guidelines on how to use the instructional model.

1.3 Study the teaching/lesson plan. There is a total of ten lesson plans (page 15).

#### **2. Procedure in the Preparation of Teaching Materials Mechanics on preparation of teaching materials (How to prepare things that are necessary in teaching and learning)**

##### **2.1 Prepare Course Syllabus**

Prepare a course syllabus that is applicable for adult business students. Aside from following the requirements prescribed by a higher education institution, the Socratic-teacher should prepare a course syllabus that communicates the nature and content of the course to students; explains why students should take the course; outlines course content, structure, and organization with emphasis in business; explain how students profit from successfully completing the course; and specifically state the learning approach to be used (BSMT Model).

##### **2.2 Select Instructional Media**

In choosing the instructional media, the Socratic-teacher should make sure that all students have access to the Internet, access to a computer or smartphones and have a Facebook account. Each student should be a member of the assigned Facebook account for the class.

### 2.3 Select Instructional Material

The main instructional material to be used in this model is the business case study. It must be remembered that the case should be about business and recent cases.

Specifically, in order to use the BSMT Model effectively, the following procedures must be followed:

2.3.1 Study the lesson plan.

2.3.2 Provide case studies related to business.

2.3.3 Make sure students are assigned their case studies in a group.

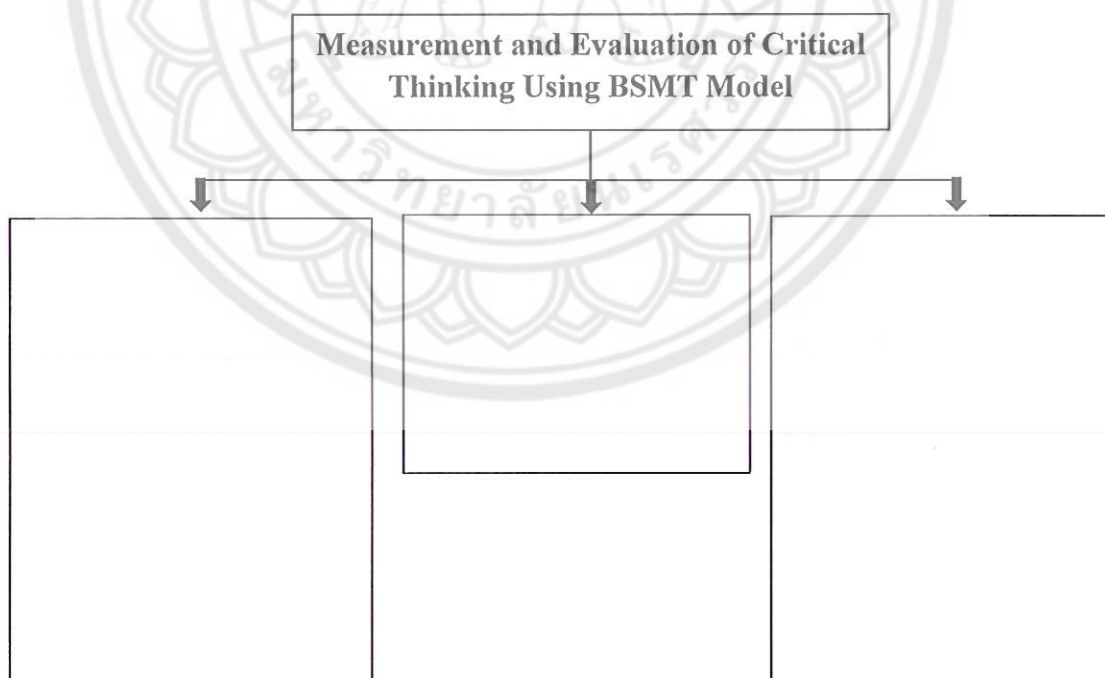
2.3.4 Create a Facebook account exclusive to the members of the class and make sure that everyone added the Facebook account name.

2.3.5 Check the presentation dates of each group.

2.3.6 Monitor everyone's participation.

2.3.7 Measure and evaluate students' critical thinking skills.

### 2.4 Measurement and Evaluation of Critical Thinking using the BSMT model





### **Guidelines in Conducting Teaching**

In using the BSMT Model, it is important to consider the role of the instructor (Socratic teacher) and the student (interlocutor):

#### **1. Role of the Instructor (Socratic Teacher)**

1.1 The Socratic teacher will make a good opening question to the class which will stimulate curiosity, have no single “right” answer, be structured to generate dialogue that leads to a clearer understanding of textual concepts, and require participants to make textual references. The questions must also challenge the student-interlocutor to make comparisons, give evidence for cause-and-effect relationships, provide suggestions, and compare it to their personal lives.

1.2 The Socratic teacher should keep the discussion focused. There is a possibility that the student-interlocutor might discuss related topics.

1.3 The Socratic teacher should keep the discussion intellectually responsible.

1.4 The Socratic teacher must stimulate the discussion with probing questions, maintaining the dialectic style (question and answer) every time.

1.5 The Socratic teacher should act as a ‘guide on the side’ and periodically summarize what has and what has not been dealt with and/or resolved.

1.6 The Socratic teacher must draw as many students as possible into the discussion. Keeping the class card will help the Socratic teacher to monitor the participation of everyone in class.

1.7 The Socratic teacher should create “productive discomfort” and respect every view of interlocutors.

1.8 The Socratic teacher should wait to conclude the discussion until all angles have been discussed.

1.9 The Socratic should respond to all answers with a further question (that calls upon the respondent to develop his/her thinking in a fuller and deeper way) (Paul, Martin and Adamson, 1989).

1.10 The Socratic teacher should treat all assertions as a connecting point to further thoughts (Paul, Martin and Adamson, 1989).

1.11 The Socratic teacher should treat all thoughts as in need of development (Paul, Martin and Adamson, 1989).

1.12 The Socratic teacher should recognize that all questions presuppose prior questions and all thinking presupposes prior thinking. When raising questions, be open to the questions they presuppose (Paul, Martin and Adamson, 1989).

## **2. Role of the Student (Interlocutor)**

Prior to using the model, it is significant for the teacher to explain the student-interlocutor role:

2.1 The interlocutor-student should come to class prepared by reading the case assigned.

2.2 The interlocutor-student should participate when called upon.

2.3 The interlocutor-student should answer questions as carefully and clearly as possible.

2.4 The interlocutor-student should address the whole class so that everyone can hear the answers.

2.5 The interlocutor-student should be as succinct as possible in the interest of maximizing classroom time and effectiveness.

2.6 The interlocutor-student should keep the discussion focused.

2.7 The interlocutor-student should keep the discussion intellectually responsible.

2.8 The interlocutor-student should respect every view of the interlocutors.

2.9 The interlocutor-student should treat all ideas as connected and necessary for the development of better ideas.

2.10 The interlocutor-student should treat probing questions as an opportunity to clarify ideas.



**PART III: LESSON PLAN****(Sample Lesson Plan)**

Week 1

**Topic: Introduction to Business Ethics****Duration: 3 hours****1. Overview**

This lesson plan is designed to teach the course content and integrate the instruction of critical thinking into undergraduate business students. In this lesson, the student is expected to understand what business ethics is and its importance. Parallel to the content is the use of a case closely related to the topic. Recognizing assumptions, evaluating arguments and drawing conclusions are the critical thinking skills that the students will enhance by the completion of the lesson.

**2. Objectives**

At the completion of the lesson, the student is expected to:

(Knowledge)

2.1 Understand business ethics and its importance in organizations.

2.2 Examine the historical foundations and evolution of business ethics.

2.3 Identify ethical value systems that support business performance.

(Process)

2.4 Analyze and gain insight into the extent of ethical misconduct in the workplace and the pressures of unethical behavior.

2.5 Separate fact from opinion or fiction.

2.6 Analyze information objectively and accurately and question the evidence.

2.7 Decide a course of action.

(Attitude)

2.8 Participate actively in creating a coherent method of solving problems by reorganizing the elements of the content of the unit and the case presented through generating and planning.

### 3. Content

The lesson consists of the following parts:

- 3.1 What is business ethics?
- 3.2 Why study business ethics?
- 3.3 The development of business ethics
- 3.4 Developing an organizational and global ethical culture
- 3.5 The benefits of business ethics

### 4. Activities

Lecture-discussion-A 30-minute lecture-discussion of the previously assigned topic (*Introduction of Business Ethics*). This is simply an introduction of the topic.

Using the Blended Socratic Method of Teaching (BSMT) Model

Step 1: Group assignment, Analysis and Writing of a Business Case Analysis

Pre-grouping of class and pre-assignment of cases shall take place at the first class meeting. Analysis and writing of the case shall take place outside and before the date assigned for the presentation. The case analysis will be written according to the prescribed format.

Step 2: Presentation of Business Case Analysis

Case Presentation – A group of 3-4 students will present a previously assigned case (“The Coca-Cola Company Struggles with Ethical Crisis”). The group shall prepare a PowerPoint presentation and a hard copy of the case analysis prior to the date of the presentation and a hardcopy shall be given to the instructor on the day of the presentation. The presentation will take about 20-30 minutes.

Step 3: Socratic Discussion in Class (Sample Socratic Question, Appendix L)

For this step, the instructor has a class card for each student where the title of the case and the week number are written. The student will be called by random using the card. Then the questioning starts.

During this stage, the following are the sub-steps/activities:

- 1. The instructor/student asks probing questions.
- 2. The presenter/student /instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.



3. The members of the class evaluate the questions and provide more arguments and probing questions.

4. The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.

The Socratic discussion in class shall last for 90 minutes or more.

#### Step 4: Posting the Case in the Facebook Account of the Class

After the class Socratic discussion, the instructor will post the case analysis to the Facebook account named "Blended Socratic Method of Teaching." It must be noted that all the students were previously required to be a "friend" in the Facebook account created specifically for the class before the online Socratic discussion commences.

#### Step 5: Online Socratic Discussion

The online Socratic discussion (Sample Socratic Question, Appendix L) commences on the same day the class Socratic discussion ended.

It involves the following sub-steps/activities:

1. The instructor will post a summarized version of the case on the Facebook account.

2. Students' will be instructed to post their questions and/or answers. The instructor will continuously monitor and ask probing questions of students but will not give answers.

3. The instructor/student asks probing questions.

4. The presenter/student/instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.

5. The members of the class evaluate the questions and provide more arguments and probing questions.

6. The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.

There is no specific period of time to finish the discussion for each case. However, an hour is allotted for the online Socratic discussion. Students can go back to the previous case to post comments/answer even a new case has been posted.

## **5. Teaching Materials**

### **5.1 Textbook**

5.2 The case titled: “The Coca-Cola Company Struggles with Ethical Crisis” (please see attachment) - In brief, this is a 9-page case about the different ethical issues faced by then the most popular brand in the world and how the company struggled to save its reputation. The case is very relevant to the importance of studying business ethics.

### **5.3 Class Facebook account**

### **5.4 Teaching media in class (computer, overhead projector and microphone)**

## **6. Evaluation**

6.1 A quiz after the class and online Socratic discussion of each case

6.2 Class observation of students’ participation in class using the students’ class card.

6.3 Class monitoring of students’ participation in the Facebook discussion using the students’ class card.



**(Sample Lesson Plan)****Week 2****Topic: Stakeholder Relationships, Social Responsibility, and Corporate Governance**

Duration: 3 hours

**1. Overview**

This lesson plan is designed to teach the course content and integrate the instruction of critical thinking into undergraduate business students. In this lesson, the student is expected to understand what business ethics and corporate social responsibility are with emphasis on stakeholder relationships, social responsibility and corporate governance. Parallel to the content is the use of a case closely related to the topic. Recognizing assumptions, evaluating arguments and drawing conclusions are the critical thinking skills that the students will enhance by the completion of the lesson.

**2. Objectives**

At the completion of the lesson, the student is expected to:

- 2.1 Identify stakeholders' roles in business ethics.
- 2.2 Define social responsibility.
- 2.3 Examine the relationship between stakeholder orientation and social responsibility.
- 2.4 Delineate a stakeholder orientation in creating corporate responsibility.
- 2.5 Analyze the role of corporate governance in structuring ethics and social responsibility in business.
- 2.6 Separate a fact from opinion or fiction.
- 2.7 Analyze information objectively and accurately and question the evidence.
- 2.8 Decide a course of action and create a method of solving problem in business case presented.

**3. Content**

The lesson consists of the following parts:

- 3.1 Stakeholders define ethical issues in business
- 3.2 Social responsibility and the importance of a stakeholder orientation

3.3 Social responsibility and ethics

3.4 Corporate governance provides formalized responsibility for stakeholders

3.5 Implementing a stakeholder perspective

3.6 Case Problem

#### 4. Activities

Lecture-discussion-A 30-minute lecture-discussion of the previously assigned topic (Stakeholder Relationships, Social Responsibility, and Corporate Governance). This is simply an introduction of the topic.

Using the Blended Socratic Method of Teaching (BSMT) Model

Step 1: Group assignment, Analysis and Writing of a Business Case Analysis

Pre-grouping of class and pre-assignment of cases will take place at the first class meeting. Analysis and writing of the case will take place outside and before the date assigned for the presentation. The case analysis will be written according to the prescribed format.

Step 2: Presentation of Business Case Analysis

Case Presentation-A group of 3-4 students will present a previously assigned case ("Firestone: A Reputation Blowout"). The group will prepare a PowerPoint presentation and a hard copy of the case analysis prior to the date of the presentation and a hardcopy will be given to the instructor on the day of the presentation. The presentation will take about 20-30 minutes.

Step 3: Socratic Discussion in Class (Sample Socratic Question, Appendix L)

For this step, the instructor has a class card for each student where the title of the case and the week number are written. The student will be called by random using the card. Then the questioning starts.

During this stage, the following are the sub-steps/activities:

3.1 The instructor/student asks probing questions.

3.2 The presenter/student/instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.

3.3 The members of the class evaluate the questions and provide more arguments and probing questions.

3.4 The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.



The Socratic discussion in class will last for 90 minutes or more.

**Step 4: Posting the Case in the Facebook account of the class**

After class Socratic discussion, the instructor will post the case analysis to the Facebook account named “Blended Socratic Method of Teaching.” It must be noted that all the students were previously required to be a “friend” in the Facebook account created specifically for the class before the online Socratic discussion commences.

**Step 5: Online Socratic Discussion**

The online Socratic discussion (Sample Socratic Question, Appendix L) commences on the same day the class Socratic discussion ended.

It involves the following sub-steps/activities:

5.1 The instructor will post a summarized version of the case on the Facebook account.

5.2 Students will be instructed to post their questions and/or answers. The instructor will continuously monitor and ask probing questions of students but will not give answers.

5.3 The instructor/student asks probing questions.

5.4 The presenter/student / instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.

5.5 The members of the class evaluate the questions and provide more arguments and probing questions.

5.6 The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.

There is no specific period of time to finish the discussion for each case. However, an hour is allotted for the online Socratic discussion. Students can go back to the previous case to post comments/answer even a new case has been posted.

**5. Materials**

5.1 Textbook

5.2 The case titled: “Firestone: A Reputation Blowout” (please see attachment)

In brief, this case is about the fall of Firestone which centered on its “ethical failure” in dealing with stakeholders’ interests, and how the company salvaged itself. This case focuses on stakeholder responsibility, social responsibility and corporate governance. It is a 7-page case study.

5.3 Class Facebook account

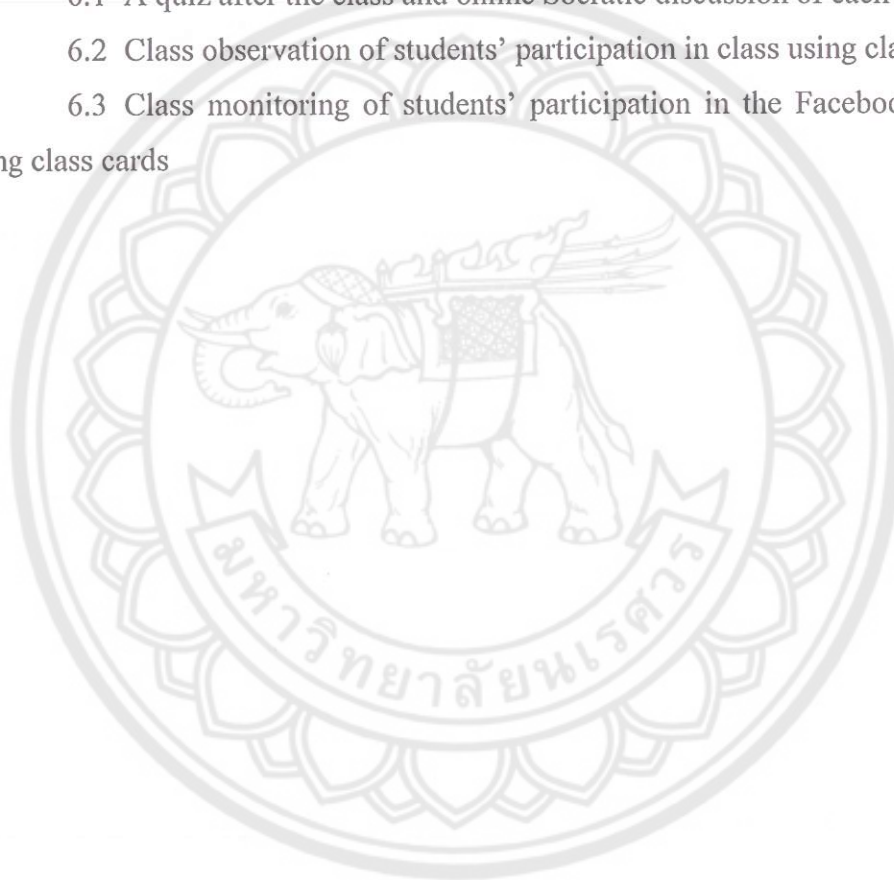
5.4 Teaching media in class (computer, overhead projector and microphone)

## **6. Application (Evaluation)**

6.1 A quiz after the class and online Socratic discussion of each case

6.2 Class observation of students’ participation in class using class cards

6.3 Class monitoring of students’ participation in the Facebook discussion using class cards





**(Sample Lesson Plan)****Week 3****Topic: Emerging Business Ethics Issues****Duration: 3 hours****1. Overview**

This lesson plan is designed to teach the course content and integrate the instruction of critical thinking into undergraduate business students. In this lesson, the student is expected to learn about emerging business ethics issues. Parallel to the content is the use of a case exactly related to the topic. Recognizing assumptions, evaluating arguments and drawing conclusions are the critical thinking skills that the students will enhance by the completion of the lesson.

**2. Objectives**

At the completion of the lesson, the student is expected to:

- 2.1 Identify stakeholders' roles in business ethics.
- 2.2 Define social responsibility.
- 2.3 Examine the relationship between stakeholder orientation and social responsibility.
- 2.4 Delineate a stakeholder orientation in creating corporate responsibility.
- 2.5 Analyze the role of corporate governance in structuring ethics and social responsibility in business.
- 2.6 Enhance critical thinking skills by separating facts from opinion or fiction, analyzing information objectively and accurately, questioning the evidence and deciding a course of action.

**3. Content**

The lesson consists of the following parts:

- 3.1 Recognizing an ethical issue
- 3.2 Ethical issues and dilemmas in business
- 3.3 The challenge of determining an ethical issue in business
- 3.4 Case Problem

#### 4. Activities

Lecture-discussion-A 30-minute lecture-discussion of the previously assigned topic (Emerging Business Ethics Issues). This is simply an introduction of the topic.

Using the Blended Socratic Method of Teaching (BSMT) Model

Step 1: Group assignment, Analysis and Writing of a Business Case Analysis

Pre-grouping of class and pre-assignment of cases will take place at the first class meeting. Analysis and writing of the case will take place outside and before the date assigned for the presentation. The case analysis will be written according to the prescribed format.

Step 2: Presentation of Business Case Analysis

Case Presentation-A group of 3-4 students will present a previously assigned case ("The Fall of Enron: A Stakeholder Failure"). The group will prepare a PowerPoint presentation and a hard copy of the case analysis prior to the date of the presentation and a hardcopy will be given to the instructor on the day of the presentation. The presentation will take about 20-30 minutes.

Step 3: Socratic Discussion in Class (Sample Socratic Question, Appendix L)

On this step, the instructor has a class card for each student where the title of the case and the week number are written. The student will be called by random using the card. Then the questioning starts.

During this stage, the following are the sub-steps/activities:

3.1 The instructor/student asks probing questions.

3.2 The presenter/student/instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.

3.3 The members of the class evaluate the questions and provide more arguments and probing questions.

3.4 The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.

The Socratic discussion in class will last for 90 minutes or more.



#### Step 4: Posting the Case in the Facebook account of the class

After class Socratic discussion, the instructor will post the case analysis to the Facebook account named “Blended Socratic Method of Teaching.” It must be noted that all the students were previously required to be a “friend” in the Facebook account created specifically for the class before the online Socratic discussion commences.

#### Step 5: Online Socratic Discussion

The online Socratic discussion (Sample Socratic Question, Appendix L) commences on the same day the class Socratic discussion ended.

It involves the following sub-steps/activities:

5.1 The instructor will post a summarized version of the case on the Facebook account.

5.2 Students’ will be instructed to post their questions and/or answers. The instructor will continuously monitor and ask probing questions of students but will not give answers.

5.3 The instructor / student ask probing questions.

5.4 The presenter / student / instructor will ask more probing questions. There is no limit to the questions. No answer will be given except for some factual questions.

5.5 The members of the class evaluate the questions and provide more arguments and probing questions.

5.6 The instructor concludes the discussion. The instructor will not answer the question posted by the teacher or student.

There is no specific period of time to finish the discussion for each case. However, an hour is allotted for the online Socratic discussion. Students can go back to the previous case to post comments/answer even a new case has been posted.

### 5. Materials

5.1 Textbook

5.2 The case titled: “The Fall of Enron: A Stakeholder Failure” (please see attachment)

It is a 10-page case study dealing with the controversial fall of Enron and other organizational ethical issues that leads to the demise of once the most biggest and influential company. The case showcased how ethical issues contributed to the failure of the stakeholder in this case.

### 5.3 Class Facebook account

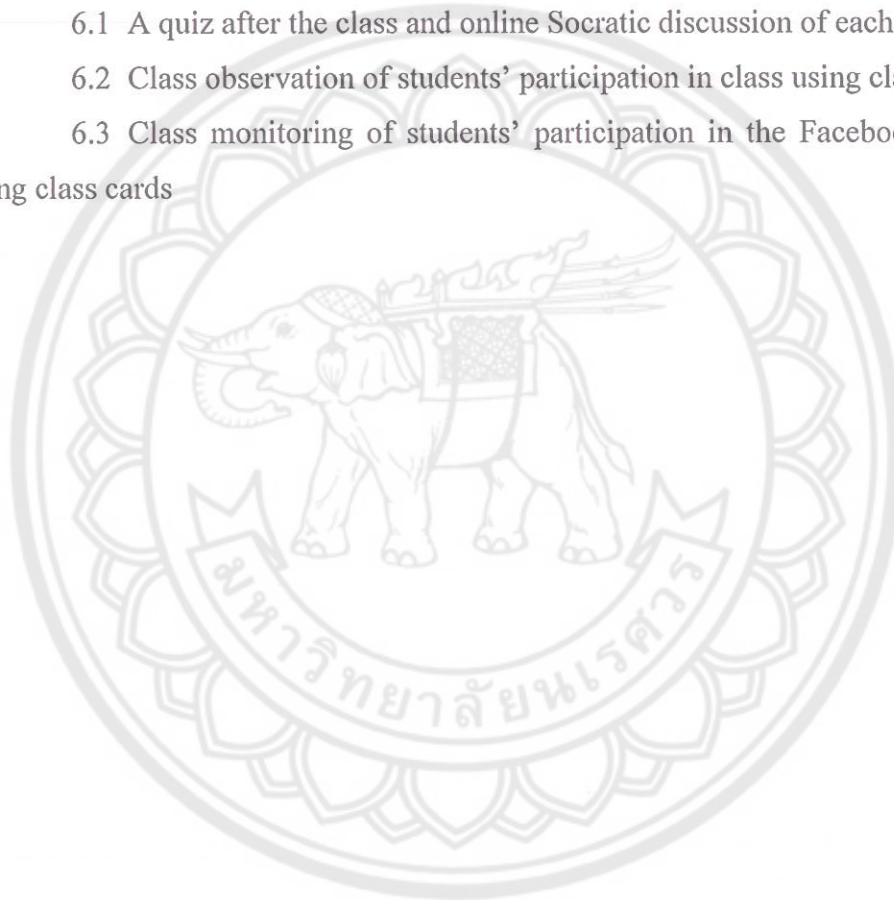
### 5.4 Teaching media in class (computer, overhead projector and microphone)

## 6. Evaluation

6.1 A quiz after the class and online Socratic discussion of each case

6.2 Class observation of students' participation in class using class cards

6.3 Class monitoring of students' participation in the Facebook discussion using class cards







**NARESUAN UNIVERSITY INTERNATIONAL COLLEGE**  
**COURSE SYLLABUS**  
**1<sup>st</sup> Semester 2014**

**Course No. : 902244**

**No. of Credit Hours 3(3-0)**

**Course Title : ETHICS AND CORPORATE SOCIAL RESPONSIBILITY**

**Program of Study : B.B.A. in Human Resource Management**

**Instructor : Ms. Eugenia A. Boa**

E-mail: eugeniab@nu.ac.th

Office: NUIC 314

Office Phone: 055-968526

Office Hours:

**Position of Course: Major Required Course**

**Course Description:**

Role of ethics and social responsibility in the management of public and private sector organizations and the role of ethics in a global economy.

**Objectives:**

1. To discuss business ethics, social responsibility and the importance of studying business ethics;
2. To examine the ethical issues in business, considering such factors as conflict of interest and ethical issues related to participants and functional areas of business;
3. To explain the moral philosophies of business ethics and different moral philosophy perspectives;

4. To discuss the different dimensions of business, such as legal, ethical, economic, and philanthropic;
5. To familiarize the students with the framework for understanding ethical decision making in business;
6. To understand organizational culture and ethical decision making;
7. To correlate and examine organizational relationships and conflicts in decision making;
8. To discuss business ethics in a global economy;
9. To develop or enhance students' critical thinking through case analysis and case presentation in class using the Socratic method of teaching.
10. To study and analyze cases in different working environments both in private and public sectors and organizations; and
11. To investigate, analyze, and prepare cases on public and private sector organizations,

#### **Classroom Rules of Conduct**

1. Students are required to attend classes every class meeting and **must** come to class on time.
2. Food and beverages are **not** permitted in the classroom except drinking water. This includes plate lunches, drinks, candy, etc.
3. Students must come to class in complete uniform.
4. Mobile phones and voice recorders are not allowed during lecture. Permission from the instructor must be obtained first.
5. Students are highly encouraged to ask questions and to participate in classroom discussion to get additional points.
6. Students will be informed of the 50% of their marks after the midterm exam.

#### **Learning Approach**

**Student-centered approach** will be the method used in this class, particularly the **Blended Socratic Method of Teaching (BSMT)** will be used in case analysis. This approach will be divided as follows:



### **A. Lecture-discussion**

Before coming to class, students are required to read the assigned chapter/s because there will always be graded recitation during class.

### **B. Business Case Analysis**

After completion of every topic, a case will be assigned individually. It must be submitted on time otherwise the same will not be accepted and the student will not get any points. A prescribed format should be followed in doing the case analysis. Discussion will continue in the assigned Facebook account.

### **C. Case Presentation**

A team of 3-4 students will be assigned current cases dealing with business ethics and corporate social responsibility. After the presentation, there will be an open discussion about the case and a quiz. There is also an online Socratic discussion using Facebook for every case presented in class.

### **D. Class and Facebook discussion of cases**

After analysis and presentation of the case, class and online discussion will ensue. The Facebook discussion can go on until the completion of the semester or thereafter.

## **COURSE OUTLINE**

<b>Week</b>	<b>Topic</b>	<b>Description</b>
<b>1</b>	Course Overview	Introduction: Business ethics; Why study business ethics; The development of business ethics; The benefits of business ethics Case Problem: The Coca-Cola Company Struggles with Ethical Crisis
<b>2</b>	Stakeholder Relationships, Social Responsibility, and Corporate Governance	Stakeholders define ethical issues in business; Social responsibility and the importance of a stakeholder orientation; Social responsibility and ethics; Implementing a stakeholder perspective Case Problem: Firestone: A Reputation Blowout

Week	Topic	Description
3	Emerging Business Ethics Issues	Recognizing an ethical issue; Ethical issues and dilemmas in business; The challenge of determining an ethical issue in business Case Problem: The Fall of Enron: A Stakeholder Failure
4	The Institutionalization of Business Ethics	Managing ethical risk through mandated and voluntary programs; Mandated requirements for legal compliance; Laws that encourage ethical conduct; Highly appropriate core practices Case Problem: Nike: From Sweatshops to Leadership in Employment Practices
5	Ethical Decision Making and Ethical Leadership	A framework for ethical decision making in business; Using the ethical decision-making framework to improve ethical decisions; The role of leadership in corporate culture; Leadership styles influence ethical decisions; Habits of ethical leaders Case Problem: Sunbeam Corporation: 'Chainsaw AI' and Greed
6	Individual Factors: Moral Philosophies and Values	Moral philosophy; Types of moral philosophy; Applying moral philosophy to ethical decision making; Cognitive moral development; White-collar crime; The role of individual factors in business ethics Case Problem: Arthur Andersen: Questionable Accounting Practices
7	Wrap-up and class review	Wrap-up session of the topics from Week 1 to 6 and class review to assist students in their midterm exam.



Week	Topic	Description
8	<b>MIDTERM EXAMINATION</b>	A review will be given before the midterm exam
9	Organizational Factors: The Role of Ethical Culture and Relationships	The role of corporate culture in ethical decision making; Leaders influence corporate culture; Motivating ethical culture; Organizational structure and business ethics; Group dimensions of corporate structure and culture; Types of groups and group norms; Variation in employee conduct; Can people control their own actions within a corporate culture? Case Problem: Starbucks Mission: Responsibility and Growth
10	Developing an Effective Ethics Program	The responsibility of the corporation as a moral agent; The need for organizational ethics programs; An effective ethics program; Codes of conduct; Ethics officers; Ethics training and communication; Systems to monitor and enforce ethical standards Case Problem: New Belgian Brewing: Ethical and Environmental Responsibility
11	Implementing and Auditing Ethics Programs	The Ethics audit; Benefits of ethics auditing; The Auditing process; The Strategic importance of ethics auditing Case Problem: PETCO Develops Successful Stakeholder Relationships
12	Business Ethics in a Global Economy	Ethical perceptions and international business; Global values; The Multinational corporation; Sexual and racial discrimination; Human rights; Price discrimination; Bribery; Harmful

Week	Topic	Description
		products; Pollution and the natural environment; Telecommunications issues; Intellectual-property protection; World Trade Organization Case Problem: Wal-Mart: The Challenge of Managing Relationships with Stakeholders
13	Business Ethics and Organizational Performance	Relationship of business ethics to performance Case Problem: Microsoft Antitrust Battles
14	Mangroves Conservation Project	A tree planting activity which will be done in the coastal area of Samut Songkram in cooperation with the Mangroves Learning Center of the province. After the activity, a detailed report about the project will be submitted by the students.
15	Wrap-up and class review	Wrap-up session of the topics from Week 9 to 14 and class review to assist students in their final exam.
16	<b>FINAL EXAMINATION</b>	A review will be given before the final exam

**Course Materials:**

1. **“BUSINESS ETHICS: Ethical Decision Making and Cases”**

by: O.C. Ferrell; John Fraedrich and Linda Ferrell, 2012 edition (text to be purchased by the student)

2. Overhead Projector

3. Audio tapes

4. PowerPoint Presentations

5. Computer



**References:**

1. "Business Ethics: A Stakeholder and Issues Management Approach"  
By: Joseph W. Weiss 4<sup>th</sup> edition; 2006
2. "Contemporary Issues in Business Ethics"  
By: Joseph R. Desjardins; John J. McCall

**Note:** These are all available in the NUIC Reading Room.

**Student Assessment Requirements**

No.	Description	Percent	Due	Objectives
1	Quizzes	15%	Week 3, 5, 10, 14	1, 2, 3, 4, 5, 8, 9, 10
2	Business Case Presentation, Facebook Discussion and Case Analysis	20%	Every Week	1 to 12
3	Tree Planting Activity	10%	Week 12	1 to 12
4	Midterm examination	25%	Week 7	1 to 7
5	Final Examination	25%	Week 16	8 to 12
6	Attendance / Manners	5%	Every Week	1 to 12

To successfully complete this course, all items of the assessment must be attempted and a total overall grade of 50% or more obtained.

Percentage assigned for student assessment is subject to change whenever the instructor deems it necessary.

**Grading Equivalent:**

<b>A</b>	=	> 80%	<b>C</b>	=	> 60%
<b>B+</b>	=	> 75%	<b>D+</b>	=	> 55%
<b>B</b>	=	> 70%	<b>D</b>	=	> 50%
<b>C+</b>	=	> 65%	<b>F</b>	=	< 49%

**Note:** According to NUIC policy, students shall not receive more than 50% of A, B+ & B altogether, subject to exception.

**CASE 1****The Coca-Cola Company Struggles with Ethical Crisis**

This case was prepared for classroom discussion rather than to illustrate either effective or ineffective handling of administrative, ethical, or legal decisions by management. All sources used for this case were obtained through publicly available material and the Coca-Cola website.

**Source:** Ferrell, Fraedrich and Ferrel. (2012). *Business Ethics: Ethical Decision Making and Cases*. Houghton Mifflin Company, New York.

Coca-Cola has the most valuable brand name in the world and, as one of the most visible companies, has a tremendous opportunity to excel in all dimensions of business performance. However, over the last ten years, the firm has struggled to reach its financial objectives and has been associated with a number of ethical crises. Warren Buffet served as a member of the board of directors and was a strong supporter and investor in Coca-Cola but resigned from the board in 2006 after several years of frustration with Coca-Cola's failure to overcome many challenges.

Many issues were facing Doug Ivester when he took over the reins at Coca-Cola in 1997. Ivester was heralded for his ability to handle the financial flows and details of the soft-drink giant. Former-CEO Roberto Goizueta had carefully groomed Ivester for the top position that he assumed in October 1997 after Goizueta's untimely death. However, Ivester seemed to lack leadership in handling a series of ethical crises, causing some to doubt "Big Red's" reputation and its prospects for the future. For a company with a rich history of marketing prowess and financial performance, Ivester's departure in 1999 represented a high-profile glitch on a relatively clean record in one hundred years of business. In 2000, Doug Daft, the company's former president and chief operating officer, replaced Ivester as the new CEO. Daft's tenure was rocky, and the company continued to have a series of negative events in the early 2000s. For example, the company was allegedly involved in racial discrimination, misrepresenting market tests, manipulating earnings, and disrupting long-term contractual arrangements with distributors. By 2004, Daft was out and Neville Isdell had become president and worked to improve Coca-Cola's reputation.



## HISTORY OF THE COCA-COLA COMPANY

The Coca-Cola Company is the world's largest beverage company, and markets four of the world's top five leading soft drinks: Coke, Diet Coke, Fanta, and Sprite. It also sells other brands including Powerade, Minute Maid, and Dansani bottled water. The company operates the largest distribution system in the world, which enables it to serve customers and business in more than two hundred countries. Coca-Cola estimates that more than 1 billion servings of its products are consumed every day. For much of its early history, Coca-Cola focused on cultivating the market within the United State.

Coca-Cola and its archrival, PepsiCo, have long fought the "cola wars" in the United States, but Coca-Cola, recognizing additional market potential, pursued international opportunities in an effort to dominate the global soft-drink industry. By 1993 Coca-Cola controlled 45 percent of the global soft-drink market, while PepsiCo received just 15 percent of its profits from international sales. By the late 1990s, Coca-Cola had gained more than 50 percent of the global market in the soft-drink industry. Pepsi continued to target select international market to gain a greater foothold in international markets. Since 1996 Coca-Cola has focused on traditional soft drinks, and PepsiCo has gained a strong foothold on new-age drinks, has signed a partnership with Starbucks, and has expanded rapidly into the snack-food business. PepsiCo's Frito-Lay division has 60 percent of the U.S. snack-food market. Coca-Cola, on the other hand, does much of its business outside of the United States, and 85 percent of its sales now come from outside the United States. As the late Roberto Goizueta once said, "Coca-Cola used to be an American company with a large international business. Now we are a large international company with a sizable American business."

Coca-Cola has been a successful company since its inception in the late 1800s. PepsiCo, although founded about the same time as Coca-Cola, did not become a strong competitor until after World War II when it began to gain market share. The rivalry intensified in the mid-1960s, and the "cola wars" began in earnest. Today, the duopoly wages war primarily on several international fronts. The companies are engaged in an extremely competitive-and sometimes personal-rivalry, with occasional accusations of false market-share reports, anticompetitive behavior, and other

questionable business products, but without this fierce competition, neither would be as good a company as it is today.

By January 2006, PepsiCo had a market value greater than Coca-Cola for the first time ever. Its strategy of focusing on snack food and innovative strategies in the non-cola beverage market helped the company gain market share and surpass Coca-Cola in overall performance.

### COCA-COLA'S REPUTATION

Coca-Cola is the most recognized trademark and brand name in the world today with a trademark value estimated to be about \$25 billion. The company has always demonstrated a strong market orientation, marketing strategic decision and taking action to attract, satisfy, and retain customers. During World War II, for example, company president Robert Woodruff committed to selling Coke to members of the armed services for just a nickel a bottle. As one analyst said later, "Customer loyalty never came cheaper." This philosophy helped make Coke a truly global brand, with its trademark brands and colors recognizable on cans, bottles, and advertisement around the world. The advance of Coca-Cola products into almost every country in the world demonstrated the company's international market orientation. These efforts contributed to the company's strong reputation.

However, in 2000 Coca-Cola failed to make the top ten of *Fortune's* annual "America's Most Admired Companies" list for the first time a decade. Problems at the company were leadership issues, poor economic performance, and other upheavals. The company also dropped out of the top one hundred in *Business Ethics'* annual list of "100 Best Corporate Citizens" in 2001. For a company that spent years on both lists, this was disappointing, but perhaps not unexpected, given several ethical crises.

Coca-Cola's promise is that the company exists "to benefit and refresh everyone who is touched by our business." It has successfully done this by continually increasing market share and profit with Coca-Cola being the most-recognized brand in the world. Because the company is so well known, the industry so pervasive, and has a strong history of market orientation, the company has developed a number of social responsibility initiatives to enhance its trademarks. These initiatives are guided by the company's core belief in the marketplace, workplace, community, and environment.



For example, Coke wants to inspire moments of optimism through their brands and their action, as well as creating value and marketing a difference everywhere they do business. Their vision for sustainable growth is fostered by being a great place to work where people are inspired to be the best they can be, by bringing the world a portfolio of beverage brands that anticipate and satisfy peoples' desires and needs, by being a responsible global citizen that makes a difference, and by maximizing return to shareowners while being mindful of their overall responsibilities.

### **SOCIAL RESPONSIBILITY FOCUS**

Coca-Cola has made local education and community improvement programs a top priority for its philanthropic initiatives. Coca-Cola foundation "supports the promise of a better life for people and their communities. "For example, Coca-Cola is involved in a program called "Education on Wheels" in Singapore where history is brought to life in an interactive discovery adventure for children. In an interaction classroom bus, children are engaged in a three-hour drama specially written for the program. It challenges creativity and initiatives while enhancing communication skills as children discover new insights into life in the city.

Coca-Cola also offers grants to various colleges and universities in more than half of the United States, as well as numerous international grants. In addition to grants, Coca-Cola provides scholarships to more than 170 colleges, and this number is expected to grow to 287 over the next four years. It includes 30 tribal colleges belonging to the American Indian College Fund. Coca-Cola is also involved with the Hispanic Scholarship Fund. Such initiatives help enhance the Coca-Cola name and trademark and thus ultimately benefit shareholders. Each year 250 new Coca-Cola Scholars are designated and invited to Atlanta for personal interviews. Fifty students are then designated as National Scholars and receive award of \$20,000 for college; the remaining 200 are designated as Regional Scholars and receive \$4000 awards. Since the program's inception in 1986, a total of over twenty-five hundred Coca-Cola scholars have benefited from nearly \$22 million for education. The program is open to all high school seniors in the United States.

The company recognizes its responsibilities on a global scale and continues to take action to uphold this responsibility, such as taking steps not to harm the environment when acquiring goods and setting up facilities. The company is proactive on local issues, such as HIV/AIDS in Africa and has partnered with UNAIDS and other non-government organizations to put into place important initiatives and programs to help combat the threat of the HIV/AIDS epidemic.

Because consumers trust its products and develop strong attachments through brand recognition and product loyalty, Coca-Cola's actions also foster relationship marketing. For these reasons, problems at a firm like Coca-Cola can stir the emotions of many stakeholders.

## **CRISIS SITUATIONS**

The following documents a series of alleged misconduct and questionable behavior affecting Coca-Cola stakeholders. These ethical and legal problems appear to have had an impact on Coca-Cola's financial performance, with its stock trading today at the same price it did years ago. The various ethical crises have been associated with turnover in top management, departure of key investors, and the loss of reputation. There seems to be no end to these events as major crises continue to develop. It is important to try to understand why Coca-Cola has not been able to avoid these events that have been so destructive to the company.

### **Contamination Scare**

Perhaps the most damaging of Coca-Cola's Crises-and the situation that every company dreads-began in June 1999, when about thirty Belgian children became ill after consuming Coca-Cola products. Although the company recalled the product, the problem soon escalated. The Belgian government eventually ordered the recall of all Coca-Cola products, leading officials in Luxembourg and the Netherlands to recall all Coca-Cola products as well. The company eventually determined that the illnesses were a result of a poorly processed batch of carbon dioxide. Coca-Cola took several days to comment formally on the problem, which the media quickly labeled a slow response. Coca-Cola initially judged the situation to be minor and not a health hazard, but by that time a public relations nightmare had begun. France soon reported more than one hundred people sick and banned all Coca-Cola products until the problem



was resolved. Soon after, a shipment of Bonaqua, a new Coca-Cola water product, arrived in Poland, contaminated with mold. In each instance, the company's slow response and failure to acknowledge the severity of the situation harmed its reputation.

The contamination crisis was exacerbated in December 1999 when Belgium ordered Coca-Cola to halt its "Restore" marketing campaign in order to regain consumer trust and sales in Belgium. A rival firm claimed that the campaign strategy that included free cases of products, discounts to wholesalers and retailers, and extra promotion personnel was intended to illegally strengthen Coca-Cola's market share. Under Belgium's strict antitrust laws, the claim was upheld, and Coca-Cola abandoned the campaign. This decision, along with the others, reduced Coca-Cola's market standing in Europe.

#### **Competitive issues**

Questions about Coca-Cola's market dominance started government inquiries into its marketing tactics. Because most European countries have very strict antitrust laws, all firms must pay close attention to market share and position when considering joint ventures, mergers, and acquisitions. During the summer of 1999, Coca-Cola became very aggressive in the French market. As a result, the French government responded by refusing to approve Coca-Cola's bid to purchase Orangina, a French beverage company. French authorities also forced Coca-Cola to scale back its acquisition of Cadbury Schweppes, another beverage maker. Moreover, Italy successfully won a court case against Coca-Cola over anticompetitive prices in 1999, prompting the European commission to launch a full-scale probe of the company's competitive practices. PepsiCo and Virgin accused Coca-Cola of using rebates and discount to crowd their products off shelves, thereby gaining greater market share. Coca-Cola's strong-arm tactics proved to be in violation of European laws and once again demonstrated the company's lack of awareness of European culture and laws.

Despite these legal tangles, Coca-Cola products, along with many other U.S. products, dominated foreign markets throughout the world. According to some European officials, the pain that U.S. automakers felt in the 1970s because of Japanese imports is the same pain that U.S. firms are meting out in Europe. The growing omnipresence of U.S. products, especially in highly competitive markets, is why

corporate reputation-both perceived and actual-is so important to relationships with business partners, government officials, and other stakeholders.

### **Racial Discrimination Allegations**

In the spring of 1999, initially fifteen hundred African American employees sued Coca-Cola for racial discrimination but eventually grew to include two thousand current and former employees. Coca-Cola was accused of discriminating against them in pay, promotions, and performance evaluations. Plaintiffs charged that the company grouped African American workers at the bottom of the pay scale, where they typically earned \$26,000 a year less than Caucasian employees in comparable jobs. The suit also alleged that the top management had known of the discrimination since 1995 but had done nothing. Although in 1992 Coca-Cola had pledged to spend \$1 billion on goods and services from minority vendors, it did not seem to apply to their workers.

Although Coca-Cola strongly denied the allegations, the lawsuit evoked strong reactions. To reduce collateral damage, Coca-Cola created a diversity council pay \$193 million to settle the racial discrimination lawsuit.

### **Problems with the Burger King Market Test**

In 2002 Coca-Cola ran into more troubles when Matthew Whitley, amid-level Coca-Cola executive, filed a whistle-blowing suit, alleging retaliation for revealing fraud in a market study performed on behalf of Burger King. To increase sales, Coca-Cola suggested Burger King invest in and promote frozen Coke as a child's snack. The fast-food chain arranged to test market the product for three weeks in Richmond, Virginia, and evaluate the result before agreeing to roll out the new product nationally. The test market involved customers receiving a coupon for a free frozen Coke when they purchased a Value Meal (sandwich, fries, and drink). Burger King Executives wanted to be cautious about the new product because of the enormous investment that each restaurant would require to distribute and promote the product. Restaurants would need to purchase equipment to make the frozen drink buy extra syrup, and spend a percentage of their advertising funds to promote the new product.

When results of the test marketing began coming into Coca-Cola, sales of frozen Coke were grim. Coca-Cola countered the bad statistics by giving at least one individual \$10,000 to take hundreds of children to Burger King to purchase Value



Meals including the frozen Coke. Coca-Cola's action netted seven hundred additional Value Meals out of nearly one hundred thousand sold during the entire promotion. But when the U.S. attorney general for the North District of Georgia discovered and investigated the fraud, the company had to pay \$21 million to Burger King, \$540,000 to the whistle-blower, and a \$9 million pretax write-off had to be taken. It cost the company considerably in negative publicity, criminal investigations, a soured relationship with a major customer, and a loss of stakeholder trust.

#### **Inflated Earnings Related to Channel Stuffing**

Another problem that Coca-Cola faced during this period was accusations of channel stuffing. *Channel stuffing* is the practice of shipping extra inventory to wholesalers and retailers at an excessive rate, typically before the end of the quarter. Essentially, a company counts the shipments as sales although the products often remain in warehouses or are later returned to the manufacturer. Channel stuffing tends to create the appearance of strong demand (or conceals declining demand) for a product, which may result in flatted financial statement earnings thus misleading investors.

Coke was accused of sending extra concentrate to Japanese bottlers from 1997 through 1999 in an effort in inflated profits. In 2004 Coca-Cola reported finding statements of inflated earning due to the company's shopping extra concentrate to Japan. Although the company settled the allegations, the Securities and Exchange Commission (SEC) did find that channel stuffing had occurred. Coca-Cola had pressured bottlers into buying additional concentrate in exchange for extended credit, which is technically considered legitimate.

To settle with the SEC, Coca-Cola agreed to avoid engaging in channel stuffing in the future. The company also created an ethics and compliance office and is required to verify each financial quarter that it has not altered the terms of payment or extended special credit. The company agreed to work on reducing the amount of concentrate held by international bottlers. Although it settled with the SEC and Justice Department, it still faces a shareholder lawsuit regarding channel stuffing in Japan, North American, Europe, and South Africa.

### **Trouble with Distributors**

In early 2006, Coca-Cola faced problems with its bottlers, after fifty-four of them filed lawsuits seeking to block Coca-Cola from expanding delivery of PowerAde sports drinks directly to Wal-Mart warehouses beyond the limited Texas test area. Bottlers alleged that Powerade bottler contract did not permit warehouse delivery except for commissaries and that Coca-Cola had materially breached the agreement by committing to provide warehouse delivery of Powerade to Wal-Mart by proposing to use a subsidiary, CCE, as its agent for warehouse delivery.

The problem was that Coca-Cola was trying to step away from the century-old tradition of direct-store delivery, known as DSD, wherein bottlers drop off products at individual stores, stock shelves, and build merchandising displays. Coca-Cola and CCE assert they were simply trying to accommodate a request from Wal-Mart for warehouse delivery, which is how PepsiCo distributed its Gatorade brand. CCE had also proposed making payments to some other bottlers that had concerns that such an arrangement would violate antitrust laws and claimed that if Coca-Cola and CCE went forward with their warehouse delivery, it would greatly diminish the value of the bottlers' businesses.

### **International Problems Related to Unions**

Around the same time, Coca-Cola also faced intense criticism in Colombia where unions were making progress inside Coke's plants. Coincidentally, at the same time eight Coca-Cola workers died, forty-eight went into hiding, and sixty-five received death threats. The union alleges that Coca-Cola and its local bottlers were complicit in these cases and is seeking reparations to the families of the slain and displaced workers. Coca-Cola denies the allegations, noting that only one of the eight workers was killed on the premises of the bottling plant. Also, the other deaths all occurred off premises and could have been the result of Colombia's four-decade-long civil war.

### **Coke Employees Offer to Sell Trade Secrets**

A Coca-Cola administrative secretary and two accomplices were arrested in 2006 and charged in a criminal complaint with wire fraud and unlawfully stealing and selling trade secrets from the Coca-Cola Company. The accused contacted PepsiCo Executives and indicated that an individual identifying himself as "Dirk," who claimed



to be employed at a high level in Coca-Cola, offered "very detailed and confidential information". When Coca-Cola received the letter from PepsiCo about the offer, the FBI was contacted, and an undercover FBI investigation began. The FBI determined that "Dirk" was Ibrahim Dimson of Bronx, New York. Dirk provided an FBI undercover agent with fourteen pages of Coca-Cola logo-marked "Classified-Confidential" and "CLASSIFIED-Highly Restricted". In addition, Dirk also provided samples of Coca-Cola top secret products. The source of the information was Joya Williams, an executive administrative assistant for Coca-Cola's global brand director in Atlanta, who had access to some information and materials described by "Dirk". Employees should be held responsible for protecting intellectual property, and this breach of confidence by a Coca-Cola employee was a serious ethical issue.

#### **ETHICAL RECOVERY**

Despite Coca-Cola's problems, consumers surveyed after the European contamination indicated they felt that Coca-Cola would still behave correctly during times of crises. The company also ranked third globally in a PricewaterhouseCoopers survey of most-respected companies. Coca-Cola managed to retain its strong ranking while other companies facing setbacks, including Colgate-Palmolive and Procter and Gamble, were dropped or fell substantially in the rankings.

Coca-Cola has taken the initiative to counter diversity protests. The racial discrimination lawsuit, along with the threat of a boycott by the NAACP, led to Daft's plan to counter racial discrimination. The plan was designed to help Coca-Cola improve employment of minorities.

When Coca-Cola settled the racial discrimination lawsuit, the agreement stipulated that the company 1) donate \$50 million to a foundation to support programs in minority communities, 2) hire an ombudsman who would report directly to CEO Daft, 3) investigate complaints of discrimination and harassment, and 4) set aside \$36 million for a seven-person task force and authorize it to oversee the company employment's practices. The task force includes business and civil right expert and is to have unprecedented power to dictate company policy with regard to hiring, compensating and promoting women and minorities. Despite the unusual provision to

grant such power to an outside panel, Daft said, "we need to have outside people helping us. We would be foolish to cut ourselves off from the outside world".

Belgian officials closed their investigation of the health scare involving Coca-Cola and announced that no charges would be filed against the company.

A Belgian health report indicated that no toxic contamination had been founded in Coke bottles, even though the bottles were found to have contained tiny traces of carbonyl sulfide, which produces a rotten-egg smell; the amount of carbonyl sulfide would have to have been a thousand times higher to be toxic. Officials also reported that they found no structural problem with Coca-Cola's production plan and that the company had cooperated fully throughout the investigation.

#### **CURRENT SITUATION AT COCA-COLA**

While Coca-Cola's financial performance continues to lag, one issue that may have great impact on the success of the company is its relationship with distributors. Lawsuits that distributors have launched against Coca-Cola for its attempt to bypass them with PowerAde have the potential of destroying trust and cooperation in the future. Other issues related to channel stuffing and falsifying market tests to customer indicate willingness by management to bend the rules to increase the bottom line.

Although Coca-Cola seems to be trying to establish its reputation based on quality products and socially responsible activities, it has failed to manage ethical decision making in dealing with various stakeholders. An important question to consider is whether Coca-Cola's strong emphasis on social responsibility, especially philanthropic and environmental concerns, can help the company maintain its reputation in the face of highly public ethical conflict and crises.

CEO Isdell developed a two-year turnaround plan focused on new products, and the company created one thousand new products, including coffee-flavored Coca-Cola blank to be marketed as an energy beverage and soft drink. The company is also adopting new-age drinks such as lower-calorie a Powerade sport drink and flavored Dasani water. These moves are an attempt to catch up with PepsiCo who has become the noncarbonated-beverage leader. Coca-Cola continues developing products such as bottled coffee called Far Coast and black and green tea drinks called Gold Peak. Although PepsiCo has out executed Coca-Cola since 1996, Coca-Cola still has a 50



percent market share, but PepsiCo became the larger company in 2006 and Coca-Cola's long term earnings and sales have been lowered. If so many ethical issues had not distracted Coca-Cola, would its financial performance have been better?

#### QUESTIONS

1. Why do you think Coca-Cola has had one ethical issue to resolve after another over the last decade or so?
2. A news analyst said that Coca-Cola could become the next Enron. Do you think this is possible and defend your answer?
3. What should Coca-Cola do to restore its reputation and eliminate future ethical dilemmas with stakeholders?



## CASE 2

**Firestone: A Reputation Blowout**

This case was prepared for classroom discussion rather than to illustrate either effective or ineffective handling of administrative, ethical, or legal decision by management. All sources used for this case were obtained through publicly available material and the Firestone website.

**Source:** Ferrell, Fraedrich and Ferrel. (2012). *Business Ethics: Ethical Decision Making and Cases*. Houghton Mifflin Company, New York.

Harvey Firestone founded the Firestone Tire & Rubber Company in 1900 in Akron, Ohio. Bridgestone USA, Inc., a subsidiary of Tokyo-based Bridgestone Corporation, acquired the company in 1990 for \$2.6 billion. Firestone's long relationship with Ford Motor Company began in 1906 when Henry Ford bought two thousand sets of tires from Harvey Firestone. Since that initial transaction, both companies have grown and become major players in their industries. Ford, which boasts a global portfolio of more than five thousand patents, now owns many well-known automotive brands including Ford, Volvo, Mazda, Lincoln, Mercury, Jaguar, Land Rover, and Aston Martin. Firestone markets eight thousand different types and sizes of tires and a host of other products.

Despite its growth over the past hundred years, Firestone has faced more turbulence than Ford. In 1978 Firestone recalled 14.5 million tires—the largest tire recall in history. Excess application of the adhesive that binds the rubber and steel had caused five hundred tread separations and blowouts. Firestone paid a \$500,000 fine for concealing safety problems. This recall weakened the financial position of the company, founded in 1931 by Shojiro Ishibashi, and developed its name from the English translation of the founder's family name, "stone bridge." Bridgestone successfully restored the struggling company back to profitability, Firestone accounted for 40 percent of the parent company's sales.

Tire recalls have plagued other manufacture as well. On March 12, 1980, Uniroyal recalled almost 2 million tires because of tread separation. B.F. Goodrich recalled 1 million tires on August 13, 1974, because of improper inflation and



installation. Kelly-Springfield faced a recall on January 28, 1976, when 300,000 tires were recalled because of tread separation. General Tire recalled 187,000 tires on January 24, 1979, because of exposed belt wire. Cooper Tire & Rubber recalled more than 156,000 tires on August 11, 1988, because of bead flaw. On April 14, 1998, Kelly-Springfield recalled more than 500,000 tire failures because of sidewall cracking. The high number of recalls indicates that tire failure has been an industry-wide problem for more than twenty-five years.

### **THE TIMELINE FOR THE FIRESTONE RECALL**

In July 1998, Sam Boyden, an associate research administrator for State Farm Insurance, received a phone call from a claim handler asking him to determine if there were other cases of Firestone tire tread failure besides the one he was handling. He discovered twenty such cases dating back to 1992. A car fanatic, Boyden recognized that this was more than a coincidence. He sent an e-mail advising the National Highway Traffic Safety Administration (NHTSA) of his findings. He was politely thanked, but no action occurred until early 2000.

In January 2000, Anna Werner, a reporter for KHOU-TV in Houston, and two colleagues researched accidents caused by tire tread separation in Texas after an attorney mentioned the issue. Based on the results of their investigation, the television station aired a nine-minute segment. Werner also reported her findings to Joan Claybrook, a former chief of NHTSA. In the weeks that followed the airing of the story, KHOU was flooded with calls from citizens who wanted to relate their own stories of Firestone tire failure, most of them on Ford Explorer sport-utility vehicles (SUVs). KHOU eventually began directing the calls to NHTSA.

Despite the flow of information from Sam Boyden and KHOU, NHTSA was slow to take action. In early March, investigators Steve Beretzky and Rob Wahl found twenty-two complaints of tread separation that they marked for "initial evaluation". Between March and May, the number of complaints skyrocketed. On May 2, three senior NHTSA officials increased the status of the inquiry to "preliminary investigation." Within six days, NHTSA requested that Firestone supply production data and complaint files, which the company provided on July 27 with a copy going to Ford Motor Company the following day.

Sean Kane, a former employee of the Center for Auto Safety, had also tried to alert NHTSA about the problems: Kane, who founded Strategic Safety, a research group interested in product-liability issues, received an e-mail in late July 2000 from a Venezuelan sourced who disclosed Ford's tire-replacement program there. Ford had discovered that the defect rates from the Valencia, Venezuela, plant were a thousand times higher than from the Decatur, Illinois, plant. On August 1, Strategic Safety, along with the political action group Public Citizen, issued a press release asking Ford for a vehicle recall.

After Ford received Firestone's report, it immediately began analyzing the data using Cray supercomputers. Of the 2,498 complaints logged on tire failure, 81 percent involved the 15-inch P235/75R15 models. When the complaints were screened for tread separation, 84 percent of some 1,699 complaints involved Ford's Explorer, Bronco, Ranger, or F-150 SUVs and trucks. Ford relayed the results to Firestone, and representatives from the two companies met in Dearborn, Michigan, to discuss the suit on August 5. By this time, NHTSA was investigating twenty-one deaths that were possibly related to tread separation on Firestone tires. One of the deaths was civil rights leader Earl Shinhoster, who was killed while riding in a Ford Explorer that crashed on June 11, 2000, while part of a motorcade accompanying the first lady of Nigeria, Jewel Howard-Taylor. Within days, the investigation had grown to include forty-six possible deaths, and Ford and Bridgestone/Firestone met NHTSA officials to discuss plan of action. The following day, August 9, they issued a recall of 6.5 million tries.

### THE RECALL

The recall included 3.8 million P235/75R15 radial ATX and ATXII and 2.7 million Wilderness AT tires, all manufactured in Firestone's Decatur, Illinois, plant. Firestone organized the official recall by state, giving priority to Arizona, California, Florida, and Texas each accounted for 22 percent of the occurred tire failures. Based on NHTSA data, Florida and Texas each accounted for 22 percent of the complaints, followed by California with 20 percent and Arizona with 5 percent. This first phase of the recall was expected to be complete by October 2000. The second phase, involving Alabama, Georgia, Louisiana, Mississippi, Nevada, Oklahoma, and Tennessee, was



expected to be concluding by the end of 2000. Firestone announced that the recall in all remaining states would be complete by the end of 2001. It was 90 percent complete in late December 2000.

Firestone issued letters to all affected customers detailing with the procedure for replacement. Customers affected by the recall could take tires to Firestone retailers, Ford dealerships, or other tire retail outlets and receive a similar Firestone tire or equivalent competitor's model. In addition to the tire cost, the replacement included mounting and balancing fees. If replacements had been purchased before the official recall, customers who provided a receipt would be issued a reimbursement of up to \$100 per tire. Ford also began testing other brands on the Explorer and indentures thirty-four acceptable replacements.

Both companies ran advertisements and public information announcements to inform consumers how to determine whether their tires were included in the recall. Consumers could call a toll-free number if they had questions about tire models or eligibility. Despite Firestone's gradual plan, Ford encouraged all concerned motorists included in the recall, regardless of their location, to replace questionable tires immediately and, if necessary, to save the receipts for later reimbursement. Consumers not directly included in the recall could purchase new Firestone tires based on a credit system determined by the age and wear of their current tires.

After continued investigations, NHTSA encouraged Firestone to expand the recall to other sizes and models of tires, but Firestone declined. On September 1, NHTSA issued a consumer advisory to warn of potential problems with other Firestone tires, including ATXP205/75R15 tires on Chevy Blazers, ATX 31X10.50R15LT tires on 1991 through 1994 Nissan pickups, and other sizes of ATX, Fire Hawk ATX, ATX23 degree, Wide Track Radial Baja, and Wilderness AT tires-mostly those originating from the Decatur factory. Because these tires were not included in the official recall, replacements were not free. NHTSA suggested that consumers save receipts in the event that Firestone increased the depth of the recall. Included in this advisory was a list of precautionary measures consumers could take to avoid tire failure.

### **FIRESTONE'S RESPONSE TO THE CRISIS**

- Firestone successfully negotiated with union officials to avoid a potentially disruptive strike by the United Steelworkers of America that would have affected production at nine of eleven U.S. plants

- Firestone began receiving replacement tires from its parent company's plant in Japan on August 23 and expected between 325,000 and 350,000 to arrive by September 1. Bridgestone/Firestone planned to send at least one shipment per day until the recall was complete.

- Firestone's U.S. factories doubled the number of tire molds in use and increased production by seven thousand tires per day.

- During Senate hearings into the growing number of complaints and accidents, evidence surfaced that the company had known about potential tread separation problems as far back as 1994. The company admitted that it had increased production during this time to dilute the failure rate. Additionally, internal memos warned of bubbles on the tire shoulder. Company officials stated that they did not investigate further because failure rates as determinate by warranty claims had not demonstrated significant patterns. Bridgestone/Firestone officials accepted full responsibility and admitted the company had made "bad tires."

- Masatoshi Ono stepped down as CEO and was replaced by John Lampe, former executive vice president.

### **FORD'S RESPONSE TO THE CRISIS**

- Ford increased the staff monitoring its help line from three hundred to eight hundred employees and kept it open twenty-four hours a day.

- Ford closed new car production plants for three weeks so all its available tires could be used to replace the recalled tires rather than being used on one new vehicle. The company continued to pay the six thousand workers from the three closed plants, which spent much of that time helping distribute replacement tires to dispersal outlets.

- Ford created a five hundred-person crisis-management team to devise tactics to speed to recall procedure.

- Ford purchased tire molds from Firestone competitors to enable the entire industry to produce a greater quantity of replacement tires.



- Ford approached other tire manufacturers to request that they increase production of suitable replacement tires.

### **THE BLAME GAME, OR WHO'S FAULT WAS IT?**

When Ford analyzed Firestone's data, the automaker noticed ten times more complaints stemming from tires originating in Firestone's Decatur factory than from other plants and specifically for tires made in 1994 and 1995. In particular, questions have arisen about the skill of replacement workers who filled in at the Decatur factory during a two-year strike known as "the war of '94-'95." Some have suggested that quality inspections were compromised as tires piled up on the factory floor and that old, dried rubber was used in production when employees returned from the strike.

Another factor under consideration is the quality of the Decatur facility itself. Constructed in 1942, the building was used to store telecommunications for the U.S. armed forces for nineteen years before being purchased by Firestone in 1962. The Decatur plant was insufficiently air conditioned and therefore may have had a high humidity level, which decreased the adhesive properties required to bind rubber to steel. This effect became apparent when it was shown that tires produced in the winter when humidity is low were of higher quality than those produced during the more humid summer months. Another contributing factor may have been the age and condition of the equipment used to mix raw materials and press steel together. In addition, the plant's vulcanization process, which uses heat and pressure to unite the rubber fragments into one product, is suspected of having had temperature-control problems. Poor quality can result when temperatures are too hot or not hot enough.

Although many people were quick to point a blaming finger at Firestone, others believe that Ford should share in the blame. The Ford Explorer's design as well as Ford's tire-pressure of 26 pounds recommendation has been cited as a possible factor contributing to the rate of tire separations and rollover accidents. First, lower tire pressure compensates for stiff suspension and thus produces a softer ride. Underinflated tires are problematic, however, because they have greater surface area in contact with the road, which creates more wear and more flexible sidewalls, which ultimately leads to overheated tires. Second, the Explorer SUV was designed with a high center of gravity and short wheelbase-traits associated with high rollover

frequency. Moreover, low tire pressure results in diminished steering and responsiveness, which could increase the likelihood that an Explorer driver could roll over while overcorrecting or making sudden maneuvers. Because SUVs are often overloaded with passengers, luggage, and other items, investigators also looked into whether excess weight, which can lead to high friction and high heat, could be a contributing factor.

After the tire tread separation issue came to light, Ford requested that Firestone complete tests to determine whether there was a problem in the specific combination of Ford Explorers and Firestone tires. These tests completed in Arizona in late February and early March, involved 243 heavily worn tires from sixty-three Explorers. No problems were discovered at that time, and both companies dropped the issue but continued to dispute the blame. In May 2001, Ford recalled 13 million more tires. During this time, Bridgestone/Firestone dumped Ford as a customer, citing that Ford was using them as a scapegoat to avert attention from problems with Ford's Explorer model. Federal investigators ultimately concluded that tire defects were the main cause of the deadly rollovers.

#### **LEGAL AND FINANCIAL IMPLICATIONS FOR FORD AND FIRESTONE**

For Bridgestone/Firestone, the financial implications of the recall have been devastating. Although the company attempted to isolate the public perception of the problem as involving only certain tires made in one Illinois plant, maintaining an image of overall quality for its product proved difficult. A Harris poll that asked "how likely is it that this tire recall would influence your decision to purchase a Firestone product?" found that 67 percent of 814 people responded "extremely to very likely. An additional 80 percent responded "somewhat likely." After the recall announcement, the company's stock price dropped 47 percent in just one month, and it reported a \$750 million loss in 2000.

Although Ford suffered less than Firestone, its image and stock price were harmed. Ford is not directly liable under current law for the recall costs, but it is subject to private lawsuits and criminal charges for the thousands of complaints, 700 injuries, and 271 deaths in the United States. In addition, the Venezuelan government and its consumer protection agency are pursuing Ford concerning forty-six deaths in



Venezuela that involved the Explorer. In the Harris poll mentioned above, 25 percent of respondents said the tire recall was "extremely or very likely" to influence their decision to purchase a Ford product, while 22 percent said the recall to focus the problem on Firestone by insisting that it was a "tire issue," not a "vehicle issue." Nonetheless, Ford's stock price dropped 18 percent in the month after the recall announcement, partially because of decreased consumer confidence.

Both companies faced an estimated three hundred lawsuits stemming from the deaths and injuries caused by the tread-separation incidents, including one related to the death of Shinoster. Firestone settled the first of these suits, which went to trial in Texas in August 2001, out of court for \$7.85 million. Ford, which also was named in that suit, settled for \$6 million before the trial began. Most of the other suits were also settled out of court with confidential agreements. On November 8, 2001, Bridgestone/Firestone settled lawsuits brought by fifty-three U.S. states and territories by agreeing to pay \$500,000 each plus \$10 million in attorneys' fees and \$5 million to fund a consumer education campaign. As part of the settlement, the company also agreed to review claims that it had previously denied seeking reimbursement for replacement tires from competitors. Although the company said it strongly disagreed with many of the states' claims and did not admit to any wrongdoing, CEO Lampe said, "We believe that significant portions of the settlement, such as those related to consumer education, are very much in line with the company's own initiatives."

In May 2005, Bridgestone Firestone North American Tire agreed to pay Ford \$240 million that would, in effect, contribute to Ford's recall cost of \$2 billion. However, in 2006 a Texas jury penalized Ford with a \$29 million verdict that questioned the stability of the Explorer design. The plaintiff, Rose Marie Munoz, was in a rollover accident that left her paralyzed. She was driving 1992 Mazda Navajo, a rebadged Ford explorer, and was driving on a sparingly used  $10\frac{1}{2}$ -year-old spare tire that had been included in the 2000 recall. The jury decided that both the tire and the tire and car-design defect were to blame for the accidents. The jury assigned 75 percent of the blame to Ford, 10 percent to Mazda Motor Cooperation, and 15 percent to Firestone. This decision adds to the ongoing dispute between Ford and Firestone. Ford stated that it would appeal the verdict. Bridgestone's spokesperson said she felt

the jury's verdict speaks for itself, as far as responsibility goes. Bridgestone had settled earlier, out of court, with Munoz for an undisclosed amount.

In cases involving tires that had not been recalled and the design defect of Ford Explorer, Ford has gone to trial twenty-four times and won eighteen verdicts. Ford has added warning to its websites and all 2006-and-beyond vehicle manuals advising drivers to replace tires that are more than six years old.

### THE IMPACT ON OTHER COMPANIES

Many other firms were affected by the recall, including tire distributors nationwide. Many large retailers took a proactive stance and removed Firestone brands from their sales floors. Sears made the decision to remove Firestone tires even before the recall was officially announced. Sears, National Tire and Battery, and other retailers fully refunded customers who had purchased recalled tires and absorbed the mounting and balancing costs if customers purchased replacements. Many small retail operations that focused exclusively on Firestone tires changed their names and expanded or altered their product lines to avoid going bankrupt.

The recall affected competing tire manufacturers as well. Goodyear, Michelin, and other firms helped ease the recall effort by increasing their own production to reduce the tire shortage caused when so many consumers sought replacements. However, many consumers speculated that competitors might have benefited from the crisis.

Goodyear spent an extra \$1 million on television and radio promotions, full-page newspaper ads, and banner ads on Yahoo! And AOL, admitting that its intensified promotion effort were "in specific response to the recall, but done with good taste." Michelin continued its normal advertising plans, which happened to coincide with the recall news. Before the crisis, each tire company had a brand image it hoped to promote: Goodyear produced reliable tires; Michelin produced safe tires' and Firestone made high-performance tires. Now the companies are calling on those images to help customers associate desired benefits with the companies that provide them.



## THE FUTURE

In addition to the financial and legal implications for Ford and Firestone, the tire problems and subsequent recall also affect the government, regulatory agencies, and other businesses. Many suggestions for improvement have been raised at the organizational, industry, and national levels. These include implementing a nylon layer, or cap, to brace the tire and reduce the risks of separation and creating stricter quality-inspection procedures and requirements within the individual companies. On an industry level, it has been suggested that tires pass more rigorous testing by nonbiased parties. Currently, consumers can research all aspects of car quality except tires. Creating consumer reports on tire durability, traction, strength, and other improvement traits has been suggested.

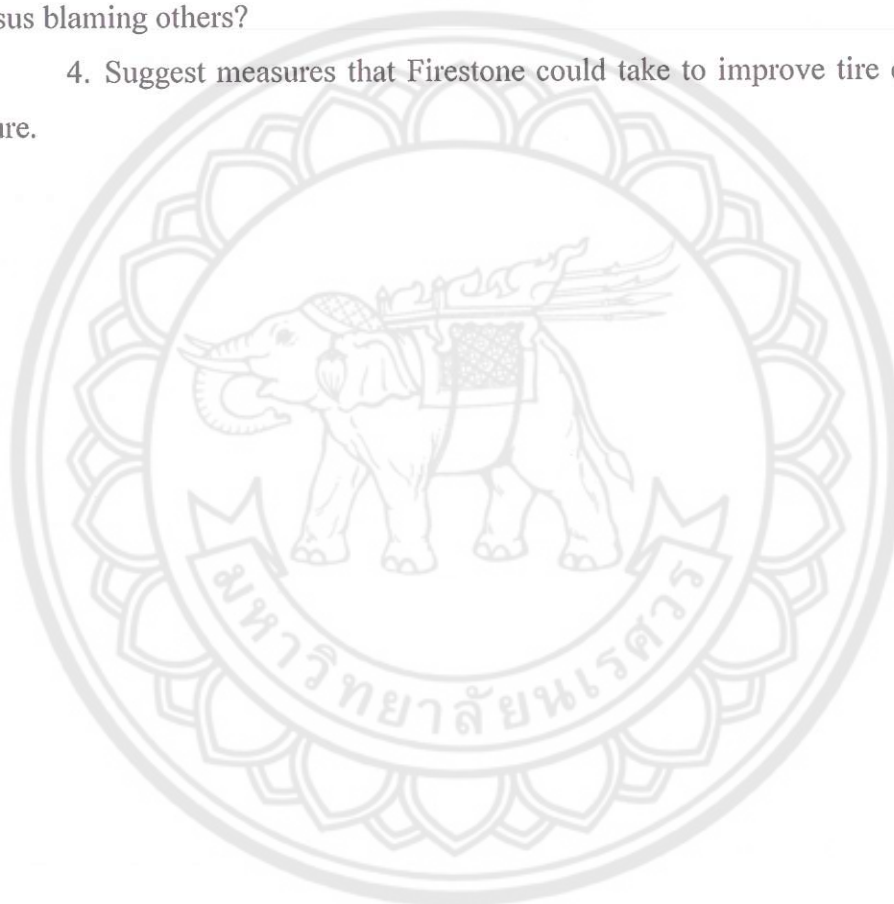
On September 7, 2000, the Senate introduced a bill that would hold executives criminally liable for withholding information on foreign recalls or defective product that result in death. The charge would be second-degree murder with a punishment of up to fifteen years in prison for selling unsafe merchandise. The bill passed on October 11, 2000. Additionally, on September 14, 2000, the tread Act was proposed to improve consumer protection and increase communication between the government tire manufacturers, and motor vehicle companies.

Ford's future outlook has continually been declining. In 2005 Ford lost market share for the tenth straight year in a row. It also lost its place as America's bestselling brand to GM's Chevrolet. Following these continuing declines and losses, Ford has emphasized a major restructuring and in 2006 announced it would cut up to thirty thousand jobs and idle fourteen plants by 2012 in an effort to revamp the company.

Bridgestone who owns the Firestone subsidiary, although hit hard by the recall, was back on track three years after the incident. Company sales have grown to pre-recall levels, and profits are starting to surge. Since the incident, the company has been involved in ongoing efforts have involved distributing nearly 2.5 million tire gauges to consumers, hosting twenty-six "Drive & Learn" educational events, sponsoring "Driver's Edge" in a MTV-style driving simulation that more than six thousand students took part in, and launched Tiresafety.com-a website dedicated entirely to tire safety.

**QUESTIONS**


1. To what extent do companies need to make a proactive effort to collect and analyze data concerning possible safety issues?
2. What mistakes did Ford, Firestone, and NHTSA each make in their early attempts to handle the crisis?
3. What are the possible ethical implications of accepting responsibility versus blaming others?
4. Suggest measures that Firestone could take to improve tire quality in the future.





## Evaluation Tools

### Students' Class Card

		<b>Naresuan University International College</b> <b>ETHICS AND CORPORATE SOCIAL RESPONSIBILITY</b> (Course Code 902244) Mon. 13:00 - 15:00 / Wed. 9:00 - 10:00 1st Semester 2014 Human Resource Management 2		<div style="border: 1px solid black; width: 50px; height: 50px; margin: 0 auto;"></div> Final Grade																	
NAME: _____		I.D Number : _____																			
NICKNAME: _____																					
<b>Month</b>	<b>DAYS</b>										<b>Attendance and Participation (Class / Facebook)</b>										
	A	CSD	FD	A	CSD	FD	A	CSD	FD	A	CSD	FD	A	CSD	FD	A	CSD	FD	A	CSD	FD
Aug	19			21			26			28											
Sept	2			4			9			11			16			18			23		
Oct	2			7			9			14			16			21			23		
Nov	4			6			11			13			18			20			25		
Dec	2			4			9			11			16			18			23		
<b>TOTAL: Attendance Points:</b> _____		<b>Discussion Points:</b> _____																			
A - Attendance CSD - Class Socratic Discussion / FP- Facebook Discussion										Eugenia A. Boa (Lecturer)											
<i>Note: 1 point shall be assigned for every participation in the discussion.</i>																					

## Sample Quiz 1



NARESUAN UNIVERSITY INTERNATIONAL COLLEGE

Ethics and Corporate Social Responsibility - 902244

## Quiz 1

SCORE

%

35

Name: \_\_\_\_\_ Student ID: \_\_\_\_\_

This quiz consists of three parts, Part 1 to Part 3.

Answer all the questions.

Items	Raw Score	Total Score
Part 1 (10 points)		
Part 1 (15 points)		
Part 1 (10 points)		

Grade	Percentage	Points	Descriptor
A	80 % above	28 – 35	Excellent
B	70 – 79%	25 – 27	Very Good
C	60 – 69%	21 – 24	Good
D	50 – 59%	17 – 20	Poor
F	49% below	16 below	Fail


**Note:** For detailed exam paper rubric, please refer to the attachment)



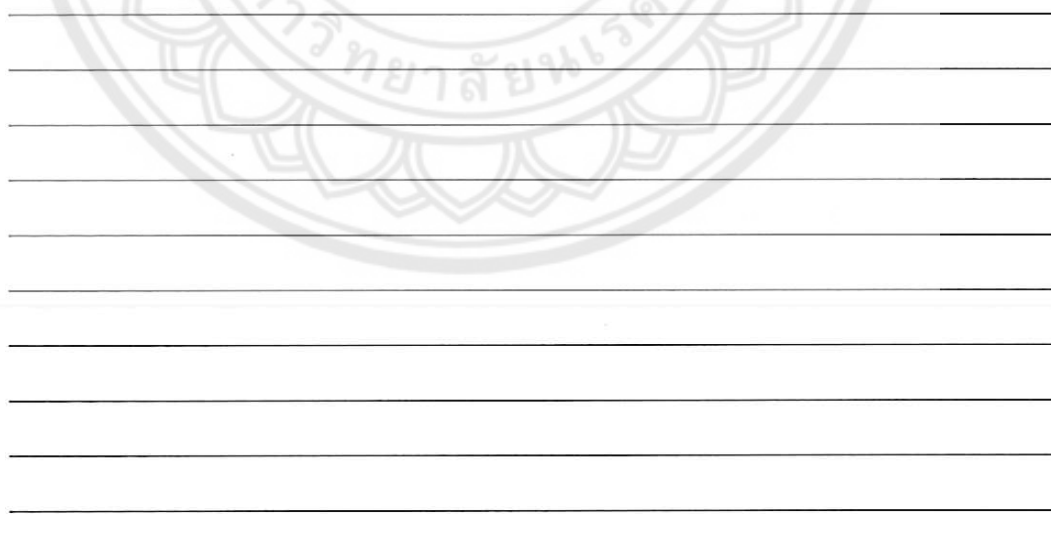
### Part 1:

**Directions:** Your answer should be at least 4-5 sentences. Every correct answer shall be assigned 5 points.

1. Explain business ethics and its importance. (5 marks)



2. What is the ethical value system that supports ethical business performance?  
Justify your answer. (5 marks)



**Part 2: Short Answer** (Case 1: The Coca-Cola Company Struggles with Ethical Crises)

**Directions:** Write your answer on the blanks provided. Every correct answer shall be assigned 1 point.

1. What are the different ethical issues that Coca Cola Company was allegedly involved? (3 points)

a) \_\_\_\_\_ c) \_\_\_\_\_  
b) \_\_\_\_\_

2. What are the names of the world's top five leading soft drinks that Coca Cola Company is selling? (3 points)

a) \_\_\_\_\_ c) \_\_\_\_\_  
\_\_\_\_\_ c) \_\_\_\_\_  
\_\_\_\_\_

3. When did Coca-Cola failed to make it to the top ten of Fortune's annual "America's Most Admired Companies" list for the first time in a decade?

\_\_\_\_\_

4. Describe briefly the most damaging of Coca-Cola's crises. (3 points)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Who sued Cola-Cola for racial discrimination? \_\_\_\_\_

\_\_\_\_\_

6. How much did Coca-Cola paid to settle the racial discrimination lawsuit?

\_\_\_\_\_

7. Explain briefly what 'channel stuffing' is (3 points)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



### Part 3: Long answer

**Directions:** Answers should be at least 5-10 sentences. Each number shall be assigned 5 points each.

1. What do you think Coca-Cola had one ethical issue to resolve after another over the last decade or so?

The logo of Mahachulalongkornrajavidyalaya University (MCAU) is a circular emblem. It features a central illustration of an elephant standing and facing left, carrying a decorative howdah on its back. The elephant is surrounded by a circular border containing the university's name in Thai script: "มหาวิทยาลัยพระนคร" (Mahavithayalai Phra Nakhon). The entire emblem is set against a background of horizontal lines.

2. What should Coca-Cola do to restore its reputation and eliminate future ethical dilemmas with stakeholders? Explain your answer.





## Sample Quiz 2



SCORE	%
35	

## NARESUAN UNIVERSITY INTERNATIONAL COLLEGE

## Ethics and Corporate Social Responsibility - 902244

## Quiz 2

Name: \_\_\_\_\_ Student ID: \_\_\_\_\_

This quiz consists of three parts, Part 1 to Part 3.

Answer all the questions.

Items	Raw Score	Total Score
Part 1 (10 points)		
Part 1 (15 points)		
Part 1 (10 points)		

Grade	Percentage	Points	Descriptor
A	80 % above	28 – 35	Excellent
B	70 – 79%	25 – 27	Very Good
C	60 – 69%	21 – 24	Good
D	50 – 59%	17 – 20	Poor
F	49% below	16 below	Fail

**Note:** For detailed exam paper rubric, please refer to the attachment)

**Part 1:**

**Directions:** Your answer should be at least 4-5 sentences. Every correct answer shall be assigned 5 points.

1. Who are the stakeholders and what are their roles in business ethics? (5 marks)

---

---

---

---

---

---

---

---

---

---

---

---

2. What is social responsibility and its relationship with stakeholder orientation? Explain your answer. (5 marks)

---

---

---

---

---

---

---

---

---

---

---

---



**Part 2: Short Answer (Case 2: Firestone: A Refutation Blowout)**

**Directions:** Write your answer on the blanks provided. Every correct answer shall be assigned 1 point.

1. Which Motor Company, Firestone has a good working relationship?  
\_\_\_\_\_
2. What are the well-known brands of Ford Motor Company? (3 points)  
d) \_\_\_\_\_ c) \_\_\_\_\_  
e) \_\_\_\_\_
3. According to the case, what are the common causes of tire blowouts? (3 points)  
b) \_\_\_\_\_ c) \_\_\_\_\_  
f) \_\_\_\_\_
4. Firestone insisted that the accidents involving their Ford Explore is a “tire issue”, not a “vehicle issue”. Why? (3 points)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Who are the tire manufacturers that benefited from the crisis involving Firestone??  
a) \_\_\_\_\_ b) \_\_\_\_\_
6. Cite the reasons why Firestone dumped Ford as a customer. (3 points)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Part 3: Long answer

**Directions:** Answers should be at least 5-10 sentences. Each number shall be assigned 5 points each.

1. Based on the case, what are the possible ethical implications of accepting responsibility versus blaming others? Justify your answer.



2. Suggest measures that Firestone could take to improve tire quality in the future.

The logo of Rajabhat Nakhon Phanom is a circular emblem. In the center is a detailed illustration of an elephant facing left, adorned with a decorative headpiece and a patterned saddle cloth. The elephant is set against a background of a stylized lotus flower with multiple layers of petals. Below the elephant, a banner contains the Thai text 'มหาวิทยาลัยนครพนม' (Mahavithayalai Nakhon Phanom). The entire logo is rendered in a light gray, semi-transparent style.

## APPENDIX I

### CRITICAL THINKING APPRAISAL 2

This practical critical thinking test will assess your ability to make inferences and assumptions and to reason logically with arguments. The test comprises the following **five** sections:

1. Inferences
2. Assumptions
3. Deductions
4. Interpreting Information
5. Arguments

Read the instructions preceding each section and answer the questions. There are a total of **40 questions** in this test and you should aim to correctly answer as many questions as you can in **40 minutes**.

Try to find a time and place where you will not be interrupted during the test.

#### Section 1: Inferences

Instructions:

An inference is a conclusion drawn from observed or supposed facts. For example, if someone presses a light switch but the light does not turn on, they might infer that the filament has burnt out. However inferences may or may not be correct. For example in this case, the bulb could be missing or a fuse could be blown.

The questions in this section of the test will begin with a statement of facts that must be regarded as true. After each statement you will be presented with possible inferences which might be drawn from facts in the statement. Analyze each inference separately and decide on its degree of truth.



For each inference you will be provided with 5 possible answers:

TRUE  
PROBABLY TRUE  
MORE INFORMATION REQUIRED  
PROBABLY FALSE, and  
FALSE

Select **TRUE** if you believe the inference is definitely true, i.e. it correctly follows beyond a reasonable doubt.

**PROBABLY TRUE** if, based on facts at hand, you think the inference is **PROBABLY TRUE**; that it is more likely to be true than false, but not **TRUE** beyond a reasonable doubt.

**MORE INFORMATION REQUIRED**, if you decide that there is not enough data to make a decision based on the provided facts (lack of facts).

**PROBABLY FALSE** if, based on facts at hand, you think the inference is **PROBABLY FALSE**; i.e. it is more likely to be false than true, but there is not enough evidence to suggest that it is definitely false.

**FALSE** if you think the inference is definitely **FALSE**; i.e. it must be incorrect because it misrepresents the facts provided or contradicts the facts provided in the statement.

This section starts with some example questions and answers.

Despite the economic downturn, Germany's GDP has risen more since 2002 than any other European country. In addition to this, Germany's unemployment rate in 2012 was at a record low. What are the reasons behind this economic success? The Social-Democrat government has implemented several successful reforms since 2003, resulting in the reduction of its budget deficit and liberalizing labor market rules. In addition, their German system of apprenticeships and training has helped to reduce youth unemployment; a common problem throughout Europe.

**Example Statement:**

**Example Inference 1:** Statistics suggest that in 2012 Germany had the lowest

unemployment rate in its history.

True

Probably True

More Information required

Probably False

False

Correct Answer: **True**

**Explanation:** the passage states that Germany's unemployment rate was at a record low in 2012. This suggests that it is the lowest rate recorded for the country. This inference is therefore true.

**Example Inference 2:** Other European countries may be able to reduce their youth unemployment rate by following in Germany's footsteps and adopting a similar scheme of apprenticeships and training.

True

Probably True

More Information required

Probably False

False

Correct Answer: **Probably True**

**Explanation:** This inference is probably true. The passage states that the adoption of apprenticeships and youth training has helped to reduce the level of youth unemployment in Germany. We can infer that such a scheme may help to reduce youth unemployment in the rest of Europe. However, just because the scheme worked in one country does not mean the same scheme will work in every country. Therefore, it is probably true that this scheme could help reduce youth unemployment across, Europe, but we cannot be certain.



**Section 1 questions now follow.**

Turkey is a surprising addition to the list of rapidly developing economies; with a GDP increase of 8.5% in the year 2011 alone. However, such rapid growth leaves worries regarding possible side-effects. For instance, in 2011 Turkey's rate of inflation was well above that of its peers. Secondly, there is increasing concern regarding Turkey's growing dependency on foreign capital. A large portion of the Turkish banking system is part-owned by banks within the Eurozone. As the single currency falters, such a dependency raises questions about stability of Turkish growth.

**Statement One:****Choices:**

- True
- Probably True
- More Information required
- Probably False
- False

**Inference 1:** There are concerns that Turkey's development is at risk of faltering in the years after 2011.

**Inference 2:** As Turkish banks are part-owned by those in the Eurozone, they may suffer if the European banks face financial difficulty.

**Inference 3:** The Turkish banks are part-owned by European banks as this provides greater variation to the market and extra finance to the economy.

**Inference 4:** Turkish banks are part owned by European banks as this provides greater economic links with the Eurozone, helping their ascension into the European Union.

**Inference 5:** The Turkish economy was surprisingly stagnant in 2011.

Some people think that prospective employees should include a photograph with their application form. Such practice has traditionally been criticized for allowing more attractive individuals to get ahead in their career over 'plain' colleagues. However, one study demonstrates that this is, in fact, untrue. Ruffle, the creator of this study, attributes his findings to the 'dumb-blonde hypothesis'- that beautiful women are thought to be unintelligent. Ruffle submits that companies would be better advised adopting the selection model employed by the Belgian public sector, where CVs are anonymous and candidate names, gender and photographs are not allowed to be included on CVs. Such a model allows the candidate to be selected on factors relevant to the role applied for.

**Statement Two:**

**Choices:**

- True
- Probably True
- More Information required
- Probably False
- False

**Inference 1:** The 'dumb-blonde hypothesis' says that more attractive women are less capable of being intelligent.

**Inference 2:** The model of selecting future employees adopted by the Belgian public sector aims to reduce discrimination based on appearance and gender.

**Inference 4:** The method of selecting future employees adopted by the Belgian public sector has had effect of discrimination based on appearance within the Belgian public sector.



## Section 2: Assumptions

### Instructions:

An assumption is something which is presupposed or taken for granted. When a person says "I will see you tomorrow", it is taken for granted that they will be around tomorrow, and that they will not have last-minute plans which prevent them from seeing you tomorrow.

In this section, you will be provided with a number of statements. Each statement will be followed by a series of proposed assumptions. You must decide which assumptions are **logically justified** based on the evidence in the statement. If you think that the assumption is taken for granted in the statement, and is therefore logically justified, select "**Assumption Made**". If you think that the assumption is not taken for granted in the statement, and is not logically justified, select "**Assumption Not Made**". Remember to judge each question individually and base your responses on the statements provided.

This section starts with some **example** questions and answers.

Public sector organizations undergo organizational changes more often than private sector organizations. This change may cause a drop in employee satisfaction rates and an increase in staff turnover in public sector organizations.

### Example Statement:

**Example Assumption One:** Private sector organizations undergo organizational change.

Assumption Made

Assumption Not Made

Correct answer: **ASSUMPTION MADE**, because the statement assumes that both private and public organizations undergo organizational change and compares the two types of organization.

**Example Assumption Three:** Private sector organizations are more efficient than public sector organizations.

Assumption Made

Assumption Not Made

Correct answer: **ASSUMPTION NOT MADE**, because the statement does not make reference to the efficiencies of either public or private sector organizations. This assumption is not implicit in the statement; i.e. it is not necessary to make this assumption in order to arrive at the statement.

Section 2 questions now follow.

In 2010, the President of the USA promised to prevent the country entering economic depression, but failed because at the beginning of 2012, over 12 million USA citizens were unemployed.

**Statement One:**

**Choices:**

Assumption Made

Assumption Not Made

**Assumption 1:** Unemployment is an indicator of economic depression.

**Assumption 2:** The number of USA citizens out of work ought to be less than 12 million.



**Assumption 3:** Presidents should stick to their promises.

**Assumption 4:** The country will not experience economic depression again

Monarchic nations, i.e. those with royal families, differ from republican nations in several ways. An example of this difference is that citizens of monarchic nations pay more tax than citizens of republican nations.

**Statement Two:**

**Choices:**

Assumption Made

Assumption Not Made

**Assumption 1:** The governments of monarchic nations are responsible for setting tax rates on their citizens.

**Assumption 2:** Republican nations do not have a royal family.

**Assumption 3:** The only types of nation are monarchic and republican

**Assumption 4:** A monarchic nation cannot be a republican nation.

### Section 3: Deductions

#### Instructions:

In this section, a statement will be provided followed by a series of suggested conclusions. Here, you must take the statement to be true. After reading each conclusion underneath the statement, you must decide whether you think it follows from the statement provided. If you agree that the conclusion follows the statement, choose **CONCLUSION FOLLOWS**. However, if you do not consider the conclusion to follow, choose **CONCLUSION DOES NOT FOLLOW**. You must select your answer based on the information presented; not using general knowledge. Similarly, you are advised not to let your own opinions or prejudices influence your decisions; stick to the statements and base your judgments solely on the facts presented.

This section starts with some example questions and answers.

A poll held in May 2012 noted that British government were trusted by only two thirds of the British population. There were three reasons for this. Firstly, the government were blamed for a return to recession. Secondly, the Prime Minister was seen as out of touch and finally, all governments face midterm slumps in popularity. Therefore:

#### Example Statement One:

**Example Conclusion One:** All Prime Ministers are out of touch.

Conclusion Follows

Conclusion Does Not Follow

**Correct Answer: Conclusion does not follow**

**Explanation:** We cannot conclude that all Prime Ministers are out of touch on the basis that one was or might have been. The correct answer is therefore the conclusion does not follow.



**Example Conclusion Two:** All Prime Ministers who are seen as out of touch will drop in popularity.

Conclusion Follows

Conclusion Does Not Follow

Correct Answer: **Conclusion does not follow**

Explanation: We cannot conclude that all Prime Ministers who are out of touch will drop in popularity. We have heard about one case of a Prime Minister losing popularity by being seen as, amongst other things, out of touch. We cannot necessarily extend this link to all Prime Ministers. The correct answer is therefore conclusion does not follow.

**Section 3 questions now follow.**

There are currently three problems facing the financial sector. Firstly, bankers are no longer seen as reliable or trustworthy. Secondly, executives of financial institutions are seen by the general public as being overpaid. Finally, it is difficult to regulate financial sector. Therefore:

**Statement One:**

**Choices:**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** Banks have never been trusted by the general public.

**Conclusion Two:** Reliability is no longer an issue when considering the failings of the financial sector

**Conclusion Three:** Overpaying financial executives may contribute to problems facing the financial sector.

Coley is a company that produces scented candles, using only natural products. Coley is against testing on animals and does not use pesticides in any of its products. Therefore:

**Statement Two:**

**Choices:**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** The scent from Coley's candles is made from fruits and berries.

**Conclusion Two:** Coley's products are unlikely to contain man made setting agents.

**Conclusion Three:** Coley's products are likely to be more expensive.

Facebook was launched on the American stock market in 2012. However, statistics suggests that several previously high-performing companies, such as Pandora, Groupon and LinkedIn fell in value after they were launched on the American stock market. Therefore:

**Statement Three:**

**Choices:**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** Social networking sites perform badly once they become publicly listed on the stock market.

**Conclusion Two:** All companies decrease in value when first launched on the American stock market.

**Conclusion Two:** Social networking sites perform badly once they become publicly listed on the stock market.



## Section 4: Interpreting Information

### Instructions:

The following questions will consist of a passage of information, followed by a series of conclusions. You are instructed to assume all information in the passage is true. The task is to judge whether or not each of the proposed conclusions logically flows beyond a reasonable doubt from the information given in the paragraph.

If you think that a conclusion follows beyond a reasonable doubt (but perhaps not absolutely), select “**Conclusion Follows**”. If you think the conclusion does not follow beyond a reasonable doubt based on the facts given, select “**Conclusion Does Not Follow**”. Do not use general knowledge when answering, only use the information provided in the passage. Remember to judge each conclusion individually.

This section starts with some example questions and answers.

Elaine is an events planner for a company called Top London Events. She specializes in themed parties and caters to London’s young professionals. Elaine is also the most popular member of staff at Top London Events. Therefore:

### Example Statement:

**Example Conclusion One:** Elaine is the most professional party planner.

Conclusion Follows

Conclusion Does Not Follow

Correct Answer: **Conclusion does not follow.**

Explanation: Based on the information provided in the statement, we cannot know whether or not Elaine is ‘professional’. This topic is not addressed by the statement, just that she is “sought after”. The correct answer is therefore, conclusion does not follow.

**Example Conclusion Two:** People at Top London Events are more likely to want to work with Elaine than other employees.

Conclusion Follows

Conclusion Does Not Follow

**Correct Answer: Conclusion follows.**

**Explanation:** The statement notes that Elaine is the most popular member of staff. So is she is the most popular it is more likely than not that people will want to work with her more than any other member of staff. The correct answer is therefore, conclusion follows.

**Section 4 questions now follow.**

Hannah has been a solicitor for three years. She works for a law firm in central London and has hopes of being promoted. To be promoted in Hannah's firm, employees must have at least four years' experience practicing as a solicitor.

**Statement One:**

**Choices**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** Hannah cannot be promoted because she doesn't have enough experience.

**Conclusion Two:** We cannot know whether Hannah can be promoted or not.

People with master's degree in business administration (MBA) earn an income on average 70% higher than people with just an undergraduate degree. MBA students from top business schools earn an income on average 50% higher than the average income of people with MBAs.



**Statement Two:****Choices**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** If a person obtains an MBA, their income will increase.

**Conclusion Two:** If a person obtains an MBA from a top business school, their income will be higher than that of the average MBA graduate.

**Conclusion One:** The average income of an MBA graduate from a top business school is over double that of the average income of a person holding only an undergraduate degree.

The Tapoloa Club is a Hawaiian-themed night club in central London. Its most popular drink is the Volcano, which emits sparks and flames. The Tapoloa Club also offers a range of cocktails in perverse containers such as pineapples and coconuts, such as the 'coconut express' and the 'pineapple pick-up' respectively. Therefore:

**Statement One:****Choices**

Conclusion Follows

Conclusion Does Not Follow

**Conclusion One:** The 'Coconut Express' is the second most popular drink sold by the Tapoloa Club.

**Conclusion Two:** All themed clubs in London sell unusual drinks.

**Conclusion Three:** The "Coconut Express" is contained in a pineapple, and the "Pineapple Pick-Up" is contained in a coconut.

## Section 5: Analyzing arguments

### Instructions:

When making decisions, it is useful to be able to distinguish between a strong argument and a weak argument. A strong argument is both important and directly related to the question. A weak argument is not directly related to the question, or is of minor importance. A weak argument may also be related to a trivial aspect of the question, or confuses correlation with causation (incorrectly assuming that because two things are related, they cause each other to happen).

In this series of questions, each question is followed by a series of arguments. For this section you must regard each argument as **true**, regardless of whether it is weak or strong.

If you consider an argument to be strong, select “**STRONG ARGUMENT**”, or if you consider an argument to be weak, select “**WEAK ARGUMENT**”. Judge each question and argument individually. Try not to take into account individual opinion or general knowledge since each argument is considered to be true.

This section starts with some example questions and answers.

Should Employers be bound by law to encourage diversity in the workplace?

### Example Question:

**Example Argument One:** Yes, encouraging diversity in the workplace will ensure a variety of opinions, promoting creativity and innovation.

Strong Argument

Weak Argument



**Correct answer:** Strong argument.

Explanation: the argument addresses the initial statement and provides a practical benefit to an employing organization, therefore providing a strong argument for the case.

**Example Argument Two:** No, workplace diversity leads to culture clashes, which makes the workplace tense and divided.

Strong Argument

Weak Argument

**Correct answer:** Strong argument.

Explanation: The argument presents a clear and practical problem with the initial statement, and addresses it directly, and is therefore a strong argument.

**Section 5 questions now follow.**

Should university-level education be free to all students?

**Statement One:**

**Choices**

Strong Argument

Weak Argument

**Argument One:** No. Too much education can lead to over-qualification, and therefore unemployment

**Argument Two:** Yes, having a highly qualified workforce ensures high levels of employee productivity in organizations.

**Argument Three:** No, research has shown that students that are not required to pay tuition fees; tend to slack off more and learn less during their degree.

Should employers allow all staff the option of flexi-time working hours?

**Statement Two:**

**Choices**

Strong Argument

Weak Argument

**Argument One:** Yes, giving staff greater flexibility will improve their work-life balance, and therefore their productivity.

**Argument Two:** Yes, organizations that value their staff are on average more productive and show lower staff turnover.

**Argument Three:** No, flexi time leads to employees working fewer hours. Working fewer hours will decrease an employee's exposure to the workplace, making career progression harder and leading to a less experienced workforce.

Should governments implement a minimum wage, outlining a minimum amount an employee is to be paid per hour?

**Statement Three:**

**Choices**

Strong Argument

Weak Argument

**Argument One:** Yes, the existence of minimum wages is a key part of a civilized society.

**Argument Three:** No, minimum wage leads to under-employment by forcing companies to take on staff part time, as they cannot afford to hire them on a full

----END OF TEST----



## APPENDIX J

### SATISFACTION SURVEY OF THE BLENDED SOCATIC METHOD OF TEACHING (BSMT) MODEL

The purpose of this survey is to provide the opportunity for the undergraduate business students to rate and voice their opinions on the instructional method used in the course they participated in. The information received will be used for furthering steps towards excellence in the future.

The form comprises 2 parts, the former using rating scales and the latter is an open-ended question format.

The rating scale has the following equivalent:

- 5 - Excellent
- 4 - Good
- 3 - Average
- 2 - Fair
- 1 - Poor

Thank you for your cooperation!

#### Part 1

Items	5	4	3	2	1
<b>1. Objectives</b>					
1.1 The objectives (focus) of the instructional model are clear.					
1.2 The objectives (focus) of the model enhance critical thinking.					
1.3 The students learn how to recognize assumptions					
1.4 The students learn how to evaluate arguments					
1.5 The students learn how to draw conclusion					

Items	5	4	3	2	1
<b>2. Instructional Process (Syntax)</b>					
2.1 The group assignment of case analysis enhances students' critical thinking skill.					
2.2 The writing of case analysis enhances students' critical thinking skill.					
2.3 The class presentation of case study enhances students' critical thinking skill.					
2.4 The Socratic discussion of case in class enhances students' critical thinking skill.					
2.5 The Socratic discussion of case in class Facebook enhances students' critical thinking.					
2.6 The instructional process is in orderly manner.					
<b>3. Content</b>					
3.1 The content is presented in orderly manner.					
3.2 The content focuses in enhancing students' critical thinking.					
3.3 The content is applicable for students' future career (business field).					
<b>4. Teaching Materials (Support system)</b>					
4.1 The case studies helps in enhancing students' critical thinking.					
4.2 The case studies are clear.					
4.3 The case studies are applicable to students' future career.					
4.4 The PowerPoint presentations are clear and easy to understand.					
4.5 The class' Facebook account helps students to study anytime and anywhere.					
4.6 The Facebook account is convenient to use.					



Items	5	4	3	2	1
<b>5. Teacher-Student Interaction or Rapport (Principles of Reaction)</b>					
5.1 The intellectual and confrontational climate through probing questions helps students to think more.					
5.2 The dialectic style (dialogue) enhances students' critical thinking.					
5.3 The environment of respect during the discussion stimulates students to think critically.					
<b>6. The Social System</b>					
6.1 The collaborative structure of teaching between students and instructor stimulates students to think more.					
6.2 The role of the instructor as a "guide on the side" helps students to think critically.					
6.3 The continuous feedback provided by instructor stimulates students to think more.					
<b>7. Measurement and Evaluation</b>					
7.1 The criteria for evaluation are appropriate.					
7.2 The requirements of the course are measured appropriately.					
<b>8. Impact on Students, Student Self-Rated Accomplishments</b>					
8.1 I learned a great deal in this course.					
8.2 This course generally fulfilled my goals.					
8.3 The instructional model use in this course generally enhances my critical thinking skill (recognizing assumptions, evaluating arguments, deducting conclusions).					

Items	5	4	3	2	1
<b>9. Overall Ratings</b>					
9.1 Instructional model's effectiveness was					
9.2 Overall value of the course was					
9.3 General quality of face-to-face and Facebook discussion was...					

**Other comments:**

.....

.....

.....

**Part II**

1. What is the most important thing you have learned from attending this course?

.....

.....

.....

.....

.....

.....

2. What is the best aspect of this course? Why? (You might like to think about the content, presentation or the organization of the sessions you attended).

.....

.....

.....

.....

.....

.....



3. What is the worst aspect of this course? Why? (You might like to think about the content, presentation or the organization of the sessions you attended).

---

---

---

---

---

---

4. Did you enhance your critical thinking by studying this course (recognizing assumptions, evaluating arguments, deducting conclusions)? How?

---

---

---

---

---

---

5. Will you recommend this course to other students? If yes / no, what will you tell them?

---

---

---

---

---

---

## APPENDIX K

### List of Experts who Validated the Questionnaires

Experts who reviewed the Blended Socratic Method of Teaching of Teaching (BSMT) model.

#### 1. Associate Professor Dr. Mary Sarawit

1) Degree	Major	Institute
B.A.	History	Seton Hill College, U.S.A
M.A.	Linguistics	University of Michigan, U.S.A
Ph.D.	Linguistics	University of Michigan, U.S.A
2) Year of teaching experience in higher education		More than 10 years

#### 2. Associate Professor Dr. Pornchulee Achava-Amrung

1) Degree	Major	Institute
B.A.	International Relations	Indiana University, U.S.A
M.S.	Educational Psychology	University of Southern California
Ed. D.	Higher Education Administration	Indiana University, U.S.A
Post Doc	Testing and Measurement	Cambridge University, U.K.
2) Year of teaching experience in higher education		More than 10 years



### 3. Associate Professor Dr. Clement Albert Trahan

1) Degree	Major	Institute
B.Sc.	Secondary Education	Old Dominion University, U.S.A.
M.Sc.	Hospitality and Tourism Management	Florida International University, Miami, U.S.A.
Pd.D.	Educational Methodology	Armstrong University, Oakland, California, U.S.A.
TESOL certificate	TEFL International U.K.	London, Great Britain, U.K.
2) Year of teaching experience in higher education		More than 10 years



## APPENDIX L

### Sample Socratic Questions

Socratic questioning is at the heart of critical thinking. The questions are adapted from Richard Paul and Linda Elder (2006).

#### 1) Questions of Clarification

- Why do you say that?
- How does this relate to our discussion?
- What do you mean by ?
- What is your main point ?
- How does relate to ?
- Could you put that another way?
- What do you think is the main issue here?
- Is your basic point or ?
- Could you give me an example?
- Would this be an example: ?
- Could you explain that further?
- Would you say more about that?
- Let me see if I understand you; do you mean or ?
- How does this relate to our discussion/problem/issue?
- What do you think John meant by his remark? What did you take Student 1 to mean?
- Student 2, would you summarize in your own words what Student 3 has said? Student 3, is that what you meant?

#### 2) Questions about an initial question or issue

- What could we assume instead?
- How can you verify or disapprove that assumption?
- What are you assuming?
- What is \_\_\_\_\_ assuming here?
- Why would you make this assumption?
- You seem to be assuming\_\_\_\_\_. Do I understand you correctly?



- All of your reasoning depends on the idea that \_\_\_\_\_. Why have you based your reasoning \_\_\_\_\_ on rather than \_\_\_\_\_?
- You seem to be assuming \_\_\_\_\_. How would you justify taking this for granted?
- Is it always the case? Why do you think the assumption holds here?

### 3) Questions that probe reasons and evidence

- What would be an example?
- What is \_\_\_\_\_ analogous to?
- What do you think causes to happen \_\_\_\_\_? Why?
- What are your reasons for saying that?
- Why did you say that?
- What other information do we need to know before we can address this question?
- Why do you think that is true?
- Could you explain your reasons to us?
- What led you to that belief?
- Do you have any evidence to support your assertion?
- Is there reason to doubt that evidence?
- What difference does that make?
- What would convince you otherwise?
- What would you say to someone who said \_\_\_\_\_?
- Can someone else give evidence to support that response?

### 4) Questions about Viewpoints and Perspectives

- What would be an alternative?
- What is another way to look at it?
- Would you explain why it is necessary or beneficial, and who benefits?
- Why is the best?
- What are the strengths and weaknesses of \_\_\_\_\_?
- How are \_\_\_\_\_ and \_\_\_\_\_ similar?
- What is a counterargument for \_\_\_\_\_?

- You seem to be approaching this issue from perspective. Why have you chosen this perspective rather than that perspective?
- How would other groups or types of people respond? Why? What would influence them?
- How could you answer the objection that would make?
- Can/did anyone see this another way?
- What would someone who disagrees say?

#### **5) Questions that probe implications and consequences**

- What generalizations can you make?
- What are the consequences of that assumption?
- What are you implying?
- How does...affect...?
- How does...tie in with what we learned before?
- What are you implying by that?
- When you say \_\_\_\_\_, are you implying ?
- But if that happened, what else would also happen as a result? Why?
- What effect would that have?
- Would that necessarily happen or only probably happen?
- What is an alternative?
- If this and this are the case, then what else must be true?

#### **6) Questions about the question**

- What was the point of this question?
- Why do you think I asked this question?
- What does...mean?
- How does...apply to everyday life?
- How can we find out?
- Is this the same issue as ?
- How could someone settle this question?
- Can we break this question down at all?
- Is the question clear? Do we understand it?
- How would put the issue?



- Is this question easy or difficult to answer? Why?
- What does this question assume?
- Would put the question differently?
- Why is this question important?
- Does this question ask us to evaluate something?
- Do we need facts to answer this?
- Do we all agree that this is the question?
- To answer this question, what other questions would we have to answer first?
- I'm not sure I understand how you are interpreting the main question at issue. Could you explain your interpretation?



## APPENDIX M

### Percentile Ranks of Total Raw Scores for Occupations

Raw Score	Industry/Occupation
	Human Resource Professional
40	99
39	99
38	99
37	94
36	86
35	79
34	73
33	68
32	61
31	55
30	49
29	44
28	39
27	32
26	27
25**	25
24	21
23	17
22	14
21	10
20	6
19	2
18	1
17	1
16	1



Raw Score	Industry/Occupation
	Human Resource Professional
15	1
14	1
13*	1
12	1
11	1
10	1
9	1
8	1
7	1
6	1
5	1
4	1
3	1
2	1
1	1
0	1
Raw Score Mean	30.0
Raw Score SD	5.7
N	140

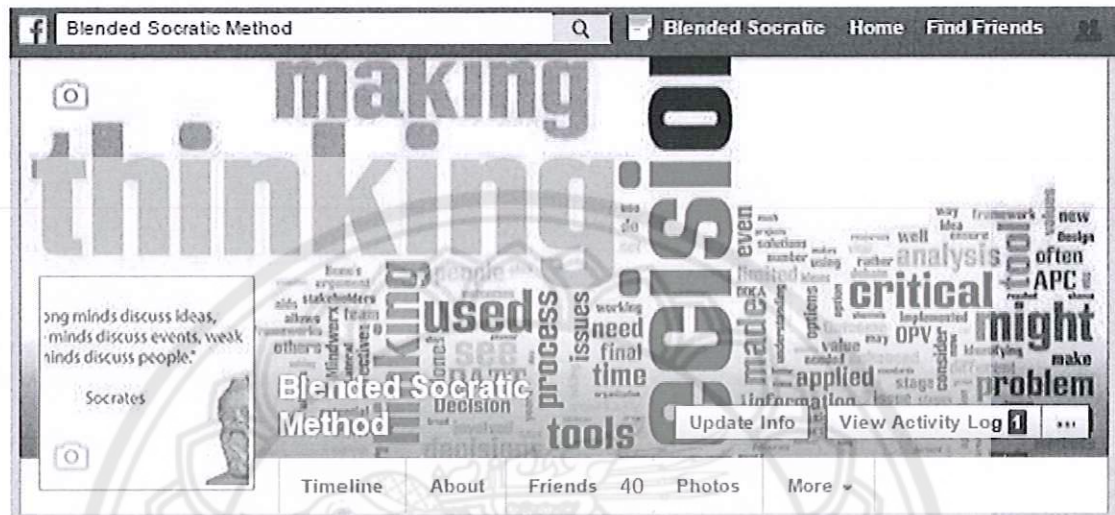
Source: Watson, G. and Glaser, E.M., 2008

\* The **pre-test** raw score of the HRM students was **13.20** and the percentile fall within **10 percentile and below** which is interpreted as **“well below average”**.

\*\*\* The **post-test** raw score of the HRM students was **25.17** and the percentile fall within **11<sup>th</sup> – 30<sup>th</sup> percentile** which is interpreted as **“below average”**.

## APPENDIX N

### Excerpts of Facebook Socratic Discussion



The Facebook Account

### CASE TITLE: Starbucks' Mission: Responsibility and Growth

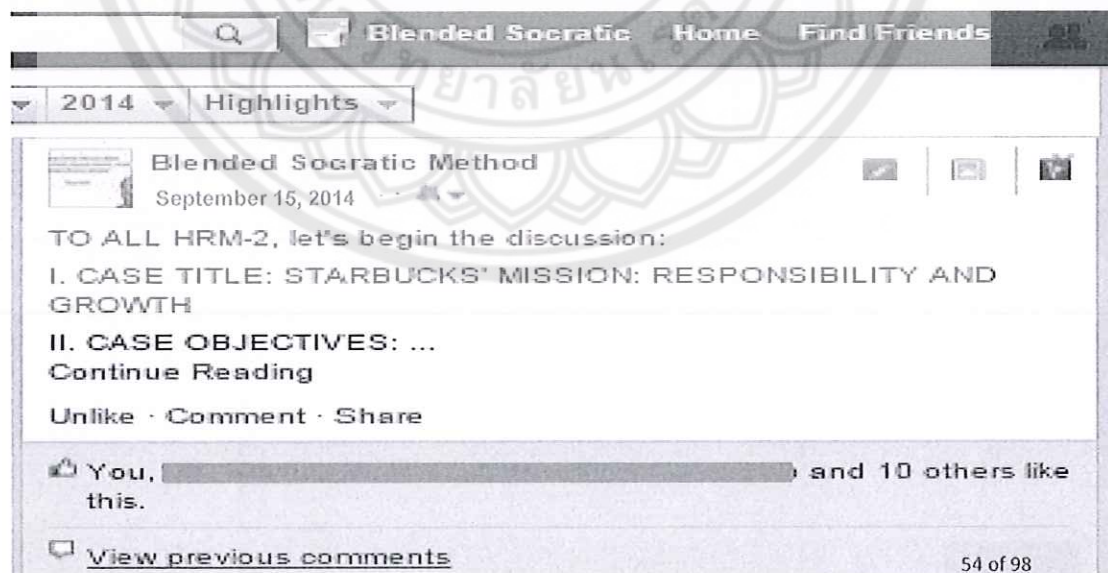



Photo source: www.google.com



(Continuation: Starbucks Case)


**Blended Socratic Method**




September 15, 2014

TO ALL HRM-2, let's begin the discussion:


I. CASE TITLE: STARBUCKS' MISSION: RESPONSIBILITY AND GROWTH

II. CASE OBJECTIVES: ...

Continue Reading


 Like
  Comment
  Share


You, [redacted] and 10 others like this.



**Blended Socratic Method**


These are the three problems in this case:III.  
PROBLEMS:...


- 1) Why do you think Starbucks has been so concerned with social responsibility in its overall corporate strategy?
- 2) Is Starbucks unique in being able to promote a high level of benefits to it... See More

September 15, 2014 at 12:27pm Edited · Like ·  2



 3. Ans : i think. First thing that make Starbucks has grown rapidly because of the ethical and socially responsible activities. Starbucks focus on employment to made a good quality they spent money for develop own employee and help farmers who are growing and supplying coffee for good quality to Starbucks , so they supply their employment to make a good quality that mean the product also will be good quality.


September 15, 2014 at 4:08pm Unlike ·  2



 Starbucks has social responsibility , good product and Then starbucks continually works to grow their by diversifying Ex.The Hear Music platform includes media bars in stores customer can download the music.They also provide wireless internet in store and Have <http://www.starbucks.com/> for promote promotion and tell informaiotn about starbucks .


**Starbucks Coffee Company**

Since 1971, Starbucks Coffee Company has been committed to ethically sourcing and roasting the highest...  
STARBUCKS.COM

September 15, 2014 at 6:42pm Edited · Unlike ·  2 · Remove Preview


 Starbucks has grown rapidly because of the ethical and socially responsible activities. Starbucks emphasize in all facets of our business and maintaining uncompromising principles. Example Environmental Mission is that "Starbucks is committed to a role... See More

September 15, 2014 at 5:50pm Unlike ·  2

## (Continuation: Starbucks Case)



Starbucks used Strategies and the movement of Starbucks this post. Because if you only count the drinks , especially coffee that Starbucks is already considered a loyal customer base this time Starbucks will turn to increased revenue from other products . Not more coffee And not just on food alone now Starbucks ( in the U.S. ) , it starts a new drink menu . Ready to attract customers into the store throughout the day, not just only in the morning or to drink coffee only.

September 15, 2014 at 6:55pm Unlike · 2



I believe that the reason why Starbucks emphasis on social responsibility, because this can bring long-term and stable development for Starbucks. Among them, the Starbucks special focus on the treatment of employees, as long as they retain employees and to give them the best welfare, then employees will be more willing to serve the consumer. Meanwhile, Starbucks strictly require employees to understand the basic and more sophisticated coffee knowledge.

September 15, 2014 at 8:57pm Unlike · 2



Blended Socratic Method Thank you for all those who answered and commented. I'll keep monitoring it and all responses will be graded accordingly.

September 15, 2014 at 9:20pm Like · 1



Blended Socratic Method I have another question: What do you mean by Starbuckization? Do you agree with it?

September 15, 2014 at 9:21pm Like · 1




1, because Starbucks did not only have in one countries, are about 37 countries. Need to abide by the rules from difference countries, to better foothold in different countries. Another ways, I think it will be influence people to choose Starbucks in the same goods. It is a kind of advertise.  
2, I think a part of unique is promote a high level of benefits to its employees. Because those employees are work for your company, your also need to think about them. And I think many companies are paying welfare for employees.  
3, yes. Because Starbucks have good ethical and care socially responsible activities, it will influence customers. They will think your company have a good moral and reputation, also can believe your goods. And Starbucks care they goods quality and quantity, too.

And another question, I think Starbuckization are belong they goods culture, Starbuck have they organization, and social responsibility. I agree it.

September 15, 2014 at 9:33pm Unlike · 2



## (Continuation: Starbucks Case)


 Starbucks refers to Starbucks globalization, Starbucks affecting people's lifestyles, people tend to support this global business brand without any reason, but I do not think starbuckization is good. I have known a news illustrates this issue. <http://news.bbc.co.uk/2/hi/6898629.stm> Like this news said, Starbucks culture does have a big enough influence, but if people blindly advocating, then it really will bring culture shock in some countries.




### BBC NEWS | Asia-Pacific | Forbidden City Starbucks closes


A Starbucks on the site of Beijing's Forbidden City closes...


NEWS.BBC.CO.UK


5pm Unlike ·  2 · Remove Preview


 SanGee Bao I totally agree with Jewel Chen... Starbuckization means going world wide, selling coffees through different branches in different country. Starbucks has made a single cup of coffee come from nearly all corners of the earth. The coffee itself comes from South and Central America, South East Asia and Africa. The paper for the cups comes from Canada, Finland, Sweden, and Norway, and the sugar comes from Brazil and Australia. It is a global commodity! The local coffee shop would most definitely have gotten its coffee source from the same regions of the world, and sugar from Central America/ Caribbean, but its milk and cups would be locally produced. We can see here that coffee has always been a global commodity because it will only grow in warmer climates (closer to the equator), yet it was always localized into its community and culture. Espresso in Italy, Irish Coffee, French Blend, Turkish Grind, the list goes on. And now we can walk into one single store, in many countries around the world and get nearly any regionally specialized coffee we decide. From Starbucks branches...so I think this is starbuckization.

September 15, 2014 at 10:29pm Unlike ·  3

 2. Starbucks have always be unique company where they focus more on employee's welfare rather than profit. Especially the health of employees. Like life insurances which is one of the great thing for employees. This way starbucks keep a good relationship with employees and gained employee's commitment. And let to success.


September 15, 2014 at 10:34pm Unlike ·  2

 I think Starbucks has been so concerned with social responsibility in its overall corporate strategy as a way Because it's popular and People love Starbucks and listen to their message. Because they can reach 30 of millions of customers a week, starbucks has been expending about 37 countries. Starbucks is not only concerned with the success of the company but with the satisfaction of their employees and customers.


September 15, 2014 at 11:12pm Unlike ·  3




## (Continuation: Starbucks Case)

 starbucks grown to now more than 20,000 stores in over 60 countries, so too has our commitment to use our scale for good. it is vision that together we will elevate our partners, customers, suppliers and neighbors to create positive change. To be innovators, leaders and contributors to an inclusive society and a healthy environment so that Starbucks and everyone we touch can endure and thrive.

September 15, 2014 at 11:17pm Unlike · 2


 I think that Starbucks have responsibility to employee because good services and mission can imply to objective to goal of Starbucks and Starbucks until also contributed to CARE, a world-wide relief and development foundation and also to help farmers who are growing and supplying coffee to Starbucks and have responsible to employee and farmers.

September 15, 2014 at 11:36pm Unlike · 2



 Wit Witchayaporn 2. I think starbucks focus on employees than profits because they always take care their employees such as starbucks employees, called the partners and starbucks to take the welfare of parthers rather than the profits to be grained. That's a part of unique is promote a high level of benefits to its partners.

3. I think both are correct because starbucks has a great responsibility to society, have a great responsibility to their customers and partners. Moreover, Starbucks also uses biodegradable materials such as tissue paper that can be recycled.



September 16, 2014 at 1:54am Unlike · 2

 3 answer. I thinks Starbucks has grown rapidly due to ethical n social responsible activities because they serve 30 million customer in week and we can s see everywhere Starbuck shop...so its also sign of grown...only my feel...



September 16, 2014 at 2:18am Edited · Unlike · 1

 Blended Socratic Method That's good  ! You said, Starbucks has grow rapidly because of of its ethical and social responsibility. Does it make Starbucks UNIQUE compared to other companies? (Fai or anyone can answer this question)



September 16, 2014 at 4:34am Like · 2

 Blended Socratic Method I like your comment and the link you provided  Thank you for that! Very nice of you posting that 😊 Do you think the Music Platform helps Starbucks to promote more its products?

September 16, 2014 at 4:37am Like · 1

 Blended Socratic Method Very good answer  why do think Starbucks care MORE to its EMPLOYEES and secondary are the customers?











September 16, 2014 at 4:39am Like · 1

 Blended Socratic Method I agree with your answer  Indeed that correct! It's not only about coffee? Do you think Starbucks should develop ans sell MORE products than what they have right now?

September 16, 2014 at 4:41am Like · 1



## (Continuation: Starbucks Case)

-  **Blended Socratic Method** I agree with your answer T...  
Indeed that correct! It's not only about coffee? Do you think Starbucks should develop and sell MORE products than what they have right now?  
September 16, 2014 at 4:41am Like · 1
-  **Blended Socratic Method** Very nice info Gupgift Hrm...The figure you mentioned, does it has something to do with the Free Trade Coffee we discussed yesterday? Could you explain about it?  
September 16, 2014 at 4:44am Like · 1
-  **Blended Socratic Method** Jewel Chen, the special focus of Starbucks to its employees you mentioned, does it make STARBUCKS unique compared to other companies? Thank you for the informative link you posted. That's a very good answer and opinion 😊  
September 16, 2014 at 4:47am Like
-  **Blended Socratic Method** Thank you... that's indeed correct. You said you agree with Starbuckization, what about the issue that the products (like Coffee) that Starbucks is selling is not healthy? Will it affect your answer? Or will it change your answer?  
September 16, 2014 at 4:51am Like · 1
-  **Blended Socratic Method** Very good answer... thanks for that elaboration. ... thanks for that additional information. Would you say that other companies should follow what Starbucks is doing?  
September 16, 2014 at 4:55am Like · 1
-  **Blended Socratic Method** ... thank you for that updated information. Very good! wow there are already 20,000 stores in 60 countries. I guess it's the most updated figure. Did Starbucks overtake McDonald in the market?  
September 16, 2014 at 4:59am Edited · Like · 2
-  **Blended Socratic Method** F...  
T... thanks for your very good contribution. What do you think Starbucks should do to maintain/keep its reputation?  
September 16, 2014 at 5:01am Like · 1
-  **FoGus Nathaporn Janped** I think that should Protect the reputation of the Starbucks is. Should maintain a good quality of coffee. Should have an ethical and moral duty. And be responsible for a good friend, sincere customers. And all of these things to do, Starbucks already.  
September 16, 2014 at 8:16am Edited · Unlike · 2
-  **Blended Socratic Method** Very well said, ... Very good!  
September 16, 2014 at 8:18am Like · 2
-  **Blended Socratic Method** I have few more questions here: 1) What are the criticisms against Starbucks? 2) Who are the STAKEHOLDERS that Starbucks are very concerned with? There are five them.  
September 16, 2014 at 8:18am Like · 1



## (Continuation: Starbucks Case)



1) criticism is

- fair-trade coffee
- bovine growth hormone( BGH ) milk
- Schultz's Alleged financial links to the Israeli government
- accusations that Starbucks growth is forcing locally run coffee shop out of business

September 16, 2014 at 9:11am Unlike · 2



2) stakeholder of Starbucks is

- the environment
- employees... See More

September 16, 2014 at 9:24am Unlike · 2



I wanna answer about what teacher asked to [redacted] I

think other coffee shops and companies should follow starbucks good culture to focus more on employees than product or profit of companies. Though it doesn't make much sense, focusing on employees lets to success of company. But i do agree that employees commitments do plays a big roles in success of company. So i feel other companies should follow the good culture of starbucks, which way they can gain employees commitments and loyalty. So they should follow starbucks

September 16, 2014 at 9:58am Unlike · 2



I think starbucks has been so concerned with social responsibility because they want to promote the welfare of the people. They want to make their shop as a place where people can gather there, and chat with each other. They also want to make sure the customers get the best of the coffee since they come to starbucks. Starbucks even spent the money for its employees for insurance more than the money they spent on the raw materials. Since as long as they doing good employees will tend to be more understanding and the customers will be more supporting towards Starbucks

September 16, 2014 at 10:00am Unlike · 2



I think should keep its reputation because Starbucks produce a good quality of coffee and they care about employees of them and service for customers morethan profit. Well, they also save environment.

September 16, 2014 at 10:20am Unlike · 2



2. Yes i think Starbucks is really unique in being able to promote a high level of benefits to its employees. Since normally businesses are only look foward to earn as much profit as they want, they tend to forget about the wellbeing of the employees, but Starbucks is different. Starbucks even spent so much money for the employees' health insurance, more money than they used to buy raw material. They even give the equal benefits to both full-time and part-time employees. None other business do that much for its employees since that money they can use for other purposes such as improving the production line, or an improve in facility within the organization.

September 16, 2014 at 10:21am Unlike · 3



Blended Socratic Method Very good answers: [redacted]


and [redacted]


I especially like your OBSERVATION Tung ☺ You are also encouraged to ASK QUESTIONS ☺ That is also counted.

September 16, 2014 at 10:48am Like · 1





## (Continuation: Starbucks Case)


 from case objective 1. Starbucks built its reputation on selling specialty coffee drinks to its consumers. But after Schultz stepped aside as the CEO, new leadership made new choices. Instead of sticking to the proven successes, they branched out into other product lines, including the sale of CDs, breakfast sandwiches and fancier drinks.



September 16, 2014 at 11:24am Unlike ·  2


 **Blended Socratic Method**  is that a wise / good decision for Starbucks?


September 17, 2014 at 2:28am Edited · Unlike ·  3


 Starbucksization is strategy of globalization have effective of people in nessesary life and starbuck has made great impact ,of coffee industry. Starbuck has also express the above characteristics of Mcdonaldization .


September 16, 2014 at 12:21pm Unlike ·  3


 to keep same reputation starbucks should do what they are doing before ...it was already answer by  i fully agree with tung answer..


September 16, 2014 at 12:25pm Unlike ·  2


 Starbucks takes an active role in addressing environmental concerns that little things in their coffee shops, like tissues, are made recyclable. In fact, Starbucks takes their environmental responsibilities so seriously that it's stated on their Starbucks mission statement, and they've even made the latest Starbucks Corporate Social Responsibility Annual Report available for public view on their website!


.....  
September 16, 2014 at 1:17pm Unlike ·  2


 If we talk about harsh criticism about Starbucks, do u agree with the sentence "Schultz's alleged financial links to the Israeli government" why?(even if the answer is yes or no)

September 16, 2014 at 1:36pm Edited · Unlike ·  3

 I think not decision yet. But I thought, Starbucks has a reputation built around responsible, ethical business practices and building communities in areas where Starbucks do business. From top down, they're committed to enhancing them ethical performance through strategic relationships with global, regional and domestic suppliers. That's cause reputation.


September 16, 2014 at 3:56pm Unlike ·  2


 What do you think Starbucks should do to maintain/keep its reputation? -Maintaining the reputation of Starbucks is. A brand Recognized The most recognized in the world, so to achieve that goal Starbucks continues. The expansion of retail, so he should have a code of conduct towards clients. Maintain standards that are available and should expand to better development. To return profits to our customers.


September 16, 2014 at 3:57pm Unlike ·  3





## (Continuation: Starbucks Case)


 Do you think that Starbucks has grown rapidly because of its ethical and socially responsible activities or because it provides products and an environment that customers want? I think YES! they produce as customer's requirements. Their product ... See More


September 16, 2014 at 3:59pm Unlike ·  3


 Baifern Thunchanok 1) What are the criticisms against Starbucks?  
- criticisms against Starbuck is it has attracted harsh criticism on the issues like fair-trade coffee, bovine growth hormone (BGH) milk, Schultz alleged financial links to the Israeli government, and the accusations that Starbucks growth is forcing locally running coffee shops out of business.


September 16, 2014 at 4:06pm Unlike ·  3


 What makes Starbucks so different and unique from it's competitors?  
- They believe in valuing their employees, creating a good working environment and treating everyone with respect.  
- They provide equal opportunities of benefits to their part time emp... See More


September 16, 2014 at 6:25pm Unlike ·  2


 1.Starbucks has been so concerned with social responsibility because of the reduce its Eco-friendly mark and as became tangled with the community. Also it is important to the corporate because of its ethical corporate should improve in the stretched period of time. Consumers' feels worthy about conveying business to social responsible companies and the organisation' impression are good about working there and makes organisation provide much better consumer service.


September 16, 2014 at 6:56pm Unlike ·  2


 2.Starbucks is irreplaceable in actually able to offer a high level of benefits to its organisation. Many businesses do not deliver organisation with many profits. Starbucks understands how important its organisation is and that they are the face of th... See More


September 16, 2014 at 6:56pm Unlike ·  2


 3.Starbucks express growth is exceptional to both its ethical and socially accountable activities and it providing products and an environment that consumer wants. Corporate needs to worry about its business in the stretched and rigidity period of time... See More

September 16, 2014 at 6:57pm Unlike ·  2

 Starbucks : Social Responsibility  
At the very base of the company's culture it roots itself within the community.Howard Shultz's goal was to " build a company with soul.... See More


September 16, 2014 at 7:01pm Unlike ·  2

 I have more Information logo of starbucks

September 16, 2014 at 7:03pm Unlike ·  2



## (Continuation: Starbucks Case)



September 16, 2014 at 7:03pm    Unlike · 2

Starbucks Corporation is a coffeehouse chain based in the United States. Named after a character in the novel Moby Dick, it is the largest coffeehouse company in the world, with over 7500 self-operated and 5500 licensed stores in 39 countries. The curr... See More

September 16, 2014 at 7:03pm    Unlike · 2

Locations

Current

As of October 8, 2013, Starbucks is present in 62 countries and territories.... See More

September 16, 2014 at 7:08pm    Unlike · 3

I have a question in my head.. why Starbucks is so successful in worldwide..they spend more money on benefits of employees rather than on coffee. still than they have a good business. what is the link between this and success? whats the reason?

September 16, 2014 at 10:22pm    Unlike · 1

James Martin: First Starbucks want a quality employment. Starbucks need to care employees and treatment staff with the organization. Compensation is not the most important. Although each year to raise much. However, if the employees are not happy. They soon resigned anyway. Thus providing better care for their employees. Second Starbucks care more customers because Starbucks can receive all questions comments and feedback form customer to develop and improve. Customer can help Starbucks to ensure that every Starbucks service have quality. Starbucks want Customers have the best customer satisfaction.


September 16, 2014 at 11:19pm    Unlike · 1


Blended Socratic Method [redacted] n, very good comment. Who do you think is leading NOW in the market, Starbucks or McDonald? I like the word you used Mcdonaldization 😊


September 17, 2014 at 2:39am    Edited · Like





## (Continuation: Starbucks Case)


 **Blended Socratic Method** [redacted], very good comment. Who do you think is leading NOW in the market, Starbucks or McDonald? I like the word you used Mcdonaldization 😊  
September 17, 2014 at 2:39am Edited · Like


 **Blended Socratic Method** [redacted], good comment.  
September 17, 2014 at 2:42am Like · 1


 **Blended Socratic Method** With regards to your question Parsu C. Thana Don about the alleged financial links of Schultz's to the Israeli government. It's quite difficult to affirm or deny that without any concrete evidence available. If ever true, I cannot see the role of Starbucks there, except of course the one involve is their CEO. It's more of a personal decision on his part. Is there anyone who would like to add here?  
September 17, 2014 at 2:50am Like

 **Blended Socratic Method** [redacted], good answer. [redacted] S [redacted], why did you say, "it doesn't make much sense focusing on employees to success of company?" Isn't it that, Starbucks believe that "people first and profit secondary?" The company invest a lot of money... See More  
September 17, 2014 at 3:02am Edited · Like

 **Blended Socratic Method** V [redacted] and T [redacted], very good answer and observation. It seems to me that your answers didn't support I [redacted] S [redacted] answer. You made it clear that Starbucks FOCUSES on its PEOPLE, and that makes it difficult from other companies.  
September 17, 2014 at 2:59am Edited · Like


 **Blended Socratic Method** I [redacted], it's very nice of you enumerating those points.  
September 17, 2014 at 3:04am Like · 1


 **Blended Socratic Method** [redacted], very well said...thank you for the lengthy answer. I especially like the info on the current number of countries where Starbucks is operating. In just about 8 years, the number doubled (from 30, now 62!) that is truly amazing success for Starbucks.  
September 17, 2014 at 3:07am Like · 1


 **Blended Socratic Method** [redacted], thank you for answering [redacted]'s question, the link between caring so much its employees and its success. That is correct Tanakarn, the customer's satisfaction depends on its EMPLOYEES. If the company treats the EMPLOYEES excel... See More  
September 17, 2014 at 3:13am Like





## (Continuation: Starbucks Case)


 In my opinion, Starbuck has been so concerned with social responsibility because it can get good reputation for the organisation as it can be useful in long-term relationship with society. This strategy also can provide the continuing growth of the organisation indirectly way. Unlike other company, Starbuck has so concerned about wellbeing of employee. As Schultz's father suffered an injury and left his unemployed, he want to build the company that provide health care for the blue collar worker. Therefore, Starbuck is an unique. As Starbuck provide health benefits to its employees and even thier Part-time employees. In his point, to maintain a strong business he has to create environment that employees believe they're part of something larger than themselves. I think this strategy is effective on influncing and motivating its employees mind to do a better job. As Starbuck success in social responsible activities, it also lead to a social media marketing successful. It lead to rapidly grow of the business and it also retain continue growing.


September 17, 2014 at 3:22pm Edited · Unlike ·  1


 Blended Socratic Method Very well said, C... ..py...that's a very good point when you mentioned about Schultz's father too.


September 17, 2014 at 6:56pm Like ·  1

 Its not whole peoples point of view,it's just my point of view. For me it doesn't make sense before, how focusing more on employees rather than product. How can company success. But after reading fellowmates answer. I got my answer


September 18, 2014 at 9:20am Unlike ·  2


 Starbuckization means the globalization of Starbuck. Starbuck spread its culture and company towards the world. Make the world know about them and providing places for the employees. Their globalization will provide jobs to many people and bring benefits to them


September 18, 2014 at 10:17am Unlike ·  1

 And Now, the starbucks expand the market in another country and they have plan to expand more in the futher.

#I think the Starbucks company is the good sevice&the best coffee for who like to drink the good taste coffee .

September 18, 2014 at 10:21am Unlike ·  1

 Blended Socratic Method I got it, I... .. ☺ Nice comment, I... ..n and F... ..rry

September 18, 2014 at 9:29am Like ·  1

**CASE TITLE: The Fall of Enron: A Stakeholder Failure**

**Blended Socratic Method**  
October 12, 2014 · 2 people

Let's discuss about fall of Enron.

Unlike · Comment

👍 You like this.


 What social responsibility does Enron has done and what benefits were there for the employees ....  
October 12, 2014 at 2:46pm · Unlike · 👍 1

 **Blended Socratic Method** Thanks,  for starting the discussion. It seems to me that the case didn't mention much about their social responsibility to employees. Actually, it was mentined there about evaluating employees every six months. Those that will fall on the lower 20% will be fired. Do you agree with that system?  
October 13, 2014 at 9:22am · Like · 👍 1

 Write a comment...  



(Continuation: Enron Case)




Blended Socratic Method

October 12, 2014 Bang Rakam

How about Enron's corporate culture ?


Unlike · Comment

👍 You and J... like this.




Enron's corporate culture , people like to use word arrogant or prideful . The firm employed competent , creative , hard working and recruited the best employees. The culture also was about a focus on how much money could be Made for many executives.

October 12, 2014 at 4:33pm · Unlike · 👍 1




Blended Socratic Method Very good answer Tanakorn Leewongwat! yes you are right! Companies are supposed to improve the economic well-being of the stakeholder, NOT ONLY EXECUTIVES. But in this case, they focused on making money for EXECUTIVES. Blended Socratic Method and Tanakorn, how about the culture in the company of "BREAKING RULES AND PUSHING THE LIMITS" just to get what they want?

October 13, 2014 at 9:19am · Like




Blended Socratic Method Follow up question, is ENRON centralized or decentralized?

October 13, 2014 at 9:19am · Like



... company have cheat the public by telling fake report of financial and beside that they try to hide their lose..even they got lose they inform public ,they are running with profit.

October 14, 2014 at 10:22am · Like





... decentralized

October 14, 2014 at 10:23pm · Unlike · 👍 1

Write a comment...


## (Continuation: Enron Case)



**Blended Socratic Method**




 October 12, 2014


What's happen about financial in the company?

Unlike · Comment


 You and **James Maximoff** like this.



**Blended Socratic Method** Enron is totally bankrupt, no more Enron, no jobs for employees...ENRON IS NOW HISTORY.  
 October 13, 2014 at 9:16am · Like


 The very high growth in international business, make money from Enron capital requirements increase. Expansion and trade volume grows, Enron wanted to rank the reliability of the Company has a good rating. To keep borrowing costs low as possible and fu... See More  
 October 13, 2014 at 12:31pm · Unlike ·  1


**Blended Socratic Method** Very good answer **Bunphitak** 😊 Do you think Sherron Watkins did the right thing?  
 October 13, 2014 at 1:20pm · Like


---




**Blended Socratic Method**



 October 12, 2014

The fall of Enron effecting employment or the employee or not.

Unlike · Comment


 You like this.

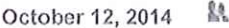

**Chini Dama** It is clearly mentioned that four thousand employees were out of job  
 October 12, 2014 at 9:07pm · Unlike ·  1


**Blended Socratic Method** Definitely affected!  
 October 13, 2014 at 9:15am · Like



(Continuation: Enron Case)



**Mameew Nattawanan** ▶ **Blended Socratic Method**



 October 12, 2014

How do you think about the accounting fraud in confidence of company? agree or disagree ?

Unlike · Comment

👍 You and Mameew Nattawanan like this.


**Chimi Dama** Its for sure that such a giant energy company's financial fraud will degrade corporate integrity and confidence of investors  
 October 12, 2014 at 9:05pm Edited · Unlike · 👍 1


**Blended Socratic Method** Disagree ofcourse, it is something that entirely take away the the trust / confidence of the stakeholders. If it happened to big companies like Enron, it is possible to happen too to small companies. Could you suggest Mameew Nattawanan any strategies to avoid accounting fraud?  
 October 13, 2014 at 1:34pm Like

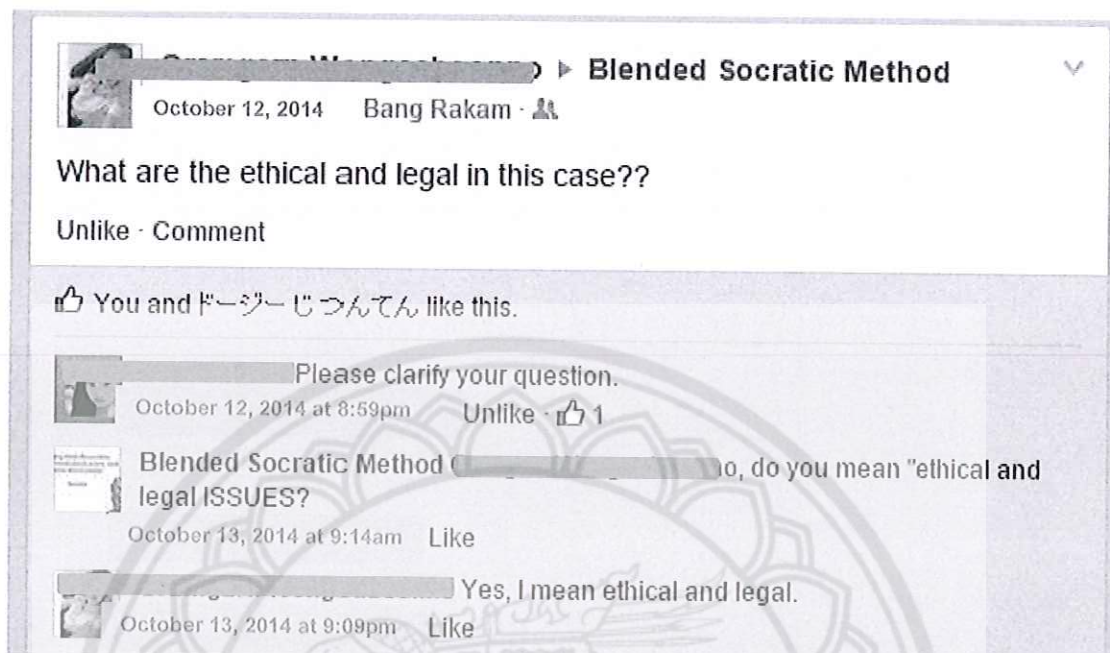

**Mameew Nattawanan** ▶ **Blended Socratic Method**

 October 12, 2014
 

**Mameew Nattawanan** a cancelled due to bankruptcy. solved some issues by giving creditors two-thirds of the amount in cash and rest in equity in three new companies  
 October 12, 2014 at 9:02pm Unlike · 👍 1
 

**Blended Socratic Method** good question Janinorn Sammaung 😊  
 October 13, 2014 at 9:15am Like

(Continuation: Enron Case)



**Blended Socratic Method**

October 12, 2014 · Bang Rakam · 11

What are the ethical and legal in this case??

Unlike · Comment

👍 You and ドーゾー じつてん like this.

Please clarify your question.

October 12, 2014 at 8:59pm · Unlike · 1

**Blended Socratic Method** ... do, do you mean "ethical and legal ISSUES?"

October 13, 2014 at 9:14am · Like

Yes, I mean ethical and legal.

October 13, 2014 at 9:09pm · Like

*(A large, faint circular watermark of a Thai university seal is visible in the background of the post.)*



(Continuation: Enron Case)



**Blended Socratic Method**

October 12, 2014 Bang Rakam · 1

what lesson did you get from this case study?

Unlike · Comment

👍 You and 1 other like this.



Main lesson learnt from this case is that many businesspeople see the fall of Enron is an outside their lives and business, very much like traffic accident and thinking it can never happen to them.

October 12, 2014 at 8:58pm Unlike · 2



Blended Socratic Method Additionally, some lessons from the case are as follows: outside auditors are needed and not only one but at least 2 or more; stakeholders should be vigilant in monitoring their interest; being a whistle blower is a "GOOD" act, be brave enough to tell the truth because the truth will us free 😊 How about you F... ill, and ... y. What lessons did you learn from this case?

October 13, 2014 at 9:13am Edited · Like



Blended Socratic Method Very good question, ... 😊 How about you, what lessons did you learn from this case?

October 13, 2014 at 9:14am Like · 1



I think ENRON company Should have an auditor of a company or a trust company. Can take care and protect the accounts of the company. Auditors are very important to the company should behave in a transparent and honest company.

October 13, 2014 at 9:27am Edited · Unlike · 1



To know about the motivation to create a list of false accounting of Enron, the accounting techniques and creating items for Unreal financial and company credit rating credit.

October 13, 2014 at 12:19pm Unlike · 1



Blended Socratic Method How about you ... ?


October 13, 2014 at 1:19pm Like





From this case i got to realize how important is management within the organization. Without a good management company will not get along together. Beside that, contributions of the major partners in the organization also play a major key

October 13, 2014 at 1:50pm Unlike · 1

## (Continuation: Enron Case)

 **Blended Socratic Method** Nice comment, F...!  
October 14, 2014 at 12:09pm · Like

 **Blended Socratic Method** Learned financial lesson for everybody. Companies can fail. We don't know what is going on inside a company. It can look good on the outside but be crumbling on the inside. A general rule for investing is not to put more than 5% of your assets in the stock of any one company. In my opinion, most folks should have most of their retirement assets in mutual funds and not in individual companies.  
October 29, 2014 at 2:41pm · Unlike · 1

 **Blended Socratic Method** That's right ... , if people are into stocks investment 😊 Would you do the same?  
October 31, 2014 at 5:46pm · Like





(Continuation: Enron Case)



### Blended Socratic Method

October 12, 2014

if you are one of lower labours in company and you know your boss is practicing unethical...in company... what you will do?

Unlike · Comment

👍 You like this.



Blended Socratic Method Very good question [redacted] rji! How about you [redacted] what will you do? Will you be a whistle blower like in the case?

October 13, 2014 at 9:09am Like · 👍 1



yap i will do same....if company is hiding little lose for one or two time...i wont do any things , since its happen in business ...in this case i thinks company is running with huge lose...for long time..i will do same..to stop other investor ..beside that i do same like this..so company can plan n share information to member so they contribute some idea to recover the lose of company....

October 13, 2014 at 9:44am Edited · Unlike · 👍 1



Blended Socratic Method That's very good ideas...I agree with you? What do you think the stakeholders (employees, investors) of Enron should have done otherwise to avoid the collapse of Enron?

October 13, 2014 at 1:18pm Like · 👍 1



i thinks stakeholder ( employees n investor ) should discuss in organization n try to help each other to solve the problem...without showing other mistake and lack to support organization ..i thinks if they have join there hand to solve this problem ,they might be recover their lose ...as done by ichitan company.even ichitan lose their company ,they to help each other...and they have success ...so if we can join hand together i thinks we can solve that problem and enron company wont be collapse now ...i think like that ajcha...what u thinks abt that..

October 13, 2014 at 1:50pm Unlike · 👍 1



Blended Socratic Method Yes, I agree with 😊 But the problem with Enron's management team was that they were the main cause of the problem at Enron. Joining hands to solve the problems at any organizations seem easy to say, but quite difficult to accomplish due to self-vested interest.

October 14, 2014 at 12:12am Like · 👍 1

(Continuation: Enron Case)

**Blended Socratic Method**

October 12, 2014

**I. CASE TITLE: THE FALL OF ENRON: A STAKEHOLDER FAILURE****II. CASE OBJECTIVES:**

- 1) To understand the corporate culture of Enron that contributes to its bankruptcy.
- 2) To know how bankers, auditors, and attorneys contribute to Enron's demise....

Continue Reading

Like · Comment · Share



h and 11 others like this.



Blended Socratic Method Review this case as well as the QUESTION AND ANSWER posted. They will be included in the QUIZ 😊

October 13, 2014 at 9:23am Like · 1



I think lack of truthfulness in the management in the actual nature of the company was the major cause of Enron scandal. If the management was truthful, there could be no dubious accounting techniques such as mark to market which covered the corporate losses and huge debts. If there could be truthfulness, Enron's officials would not be involved in the corrupt and fraudulent financial deals which led to collapse of business. If there could be truthfulness, the management would have hired transparent auditors; not the likes of Andersen law firms and investment banks. If there could be truthfulness the management would have put in place an independent financial body to sensor the behavior of the financial managers against malpractices.

October 24, 2014 at 1:27am Edited · Unlike · 2



Blended Socratic Method Very good comment, ! yes, I agree. If only Enron management was truthful to all the stakeholders, their sad fate could have been avoided. This case served as an example to other companies as well.

October 24, 2014 at 8:25pm Like · 2







Ans.3 CEO lied about the financial condition at Enron.



October 26, 2014 at 10:37am Unlike · 1





## (Continuation: Enron Case)

 h What about product and service of Enron that good or not? Is it also a problem?  
October 26, 2014 at 10:39am Edited · Unlike ·  1

 Blended Socratic Method  en, thanks for the comment. The case didn't mentioned having problems with the products produced by Enron. The problems boiled down to management.  
October 28, 2014 at 1:24pm Like

 Q1. I feel its because of lack of trust and poor management. As well as lack of communication, some how we can see there is a communication gap between upper ones and lower employees. Lower ones doesn't know what's going on in the company. How it's done or why its done.  
October 28, 2014 at 1:38pm Unlike ·  1

 Blended Socratic Method Yes  that's why we categorized Enron as purely centralized organization...  
October 30, 2014 at 5:49pm Like



(Continuation: Enron Case)

**Blended Socratic Method**

October 13, 2014

**I. CASE TITLE: THE FALL OF ENRON: A STAKEHOLDER FAILURE****II. CASE OBJECTIVES:**

- 1) To understand the corporate culture of Enron that contributes to its bankruptcy.
- 2) To know how bankers, auditors, and attorneys contribute to Enron's demise....

Continue Reading

Like · Comment · Share



Ch and 11 others like this.



**Blended Socratic Method** Review this case as well as the QUESTION AND ANSWER posted. They will be included in the QUIZ 😊

October 13, 2014 at 9:23am Like · 1



I think lack of truthfulness in the management in the actual nature of the company was the major cause of Enron scandal. If the management was truthful, there could be no dubious accounting techniques such as mark to market which covered the corporat... See More

October 24, 2014 at 1:27am Edited · Unlike · 2



**Blended Socratic Method** Very good comment, Srinath T... yes, I agree. If only Enron management was truthful to all the stakeholders, their sad fate could have been avoided. This case served as an example to other companies as well.

October 28, 2014 at 8:26pm Like · 2



**Enron** Ans.3 CEO lied about the financial condition at Enron.

October 28, 2014 at 10:37am Unlike · 1



**Ch** What about product and service of Enron that good or not? Is it also a problem?

October 28, 2014 at 10:39am Edited · Unlike · 1






**Blended Socratic Method** F..., thanks for the comment. The case didn't mentioned having problems with the products produced by Enron. The problems boiled down to management.

October 30, 2014 at 1:24pm Like






(Continuation: Enron Case)



 **Blended Socratic Method** 



October 14, 2014 Bang Rakam 



How the Enron company bankruptcy and what wrong with the company ?




Unlike · Comment



 You, P  and G  like this.


 **Blended Socratic Method** Enron filed bankruptcy to avoid liabilities from its creditors. What's wrong? the management and organizational structure.  
October 15, 2014 at 3:18pm Like ·  1

 They mismanagement and contribution major of the organization right ?  
October 16, 2014 at 3:23pm Unlike ·  1

 Excuse me , Can I ask the question some problem I don't no. That is what the government doing with the CEO , the CEO of the shareholder cost the money in the firm but CEO didn't pay it back to them ,How the grovenment doing in this problem?  
October 15, 2014 at 3:34pm Unlike ·  1

 **Blended Socratic Method** Thanks,  ry, if a company files for Bankruptcy, no other creditors can collect their money. That means the creditors cannot recover their money anymore. However, the company who filed bankruptcy totally loose their REPUTATION!  
October 18, 2014 at 6:07pm Like ·  1

 Aw ,that are bad time with shareholder and employee name kub  
October 18, 2014 at 7:22pm Unlike ·  1

 **Blended Socratic Method** Yes, that is the law. No choice, but if ever the company revives itself, it has to pay back. So normally, companies who were under bankruptcy will incorporate under different name and other details about the company. Yeah, the law is unfair, but that is the law.  
October 19, 2014 at 9:34pm Edited · Like