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A Qualitative Inquiry into the Critical Thinking Process of Hospitality Management Students

by

Tin Oo Thin

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Program of Study Committee:
Nancy E. Brown, Co-major professor
Frances M. Smith, Co-major professor
Mary Lynn Damhorst
Shirley A. Gilmore
Margaret C. Torrie

Iowa State University

Ames, Iowa

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has met the dissertation requirements of Iowa State University

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Co-major Professor

Signature was redacted for privacy.

Co-major Professor

Signature was redacted for privacy.

For the Co-major Program

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DEDICATION

This dissertation is dedicated to

my mother Daw Tin Tin Win

and

my father U Thin Tu

who provided the faith, encouragement, comfort, and support

consistently on my path.

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ABSTRACT

The research questions addressed by this qualitative inquiry were:

- How do hospitality management students demonstrate the process of critical thinking when making decisions about management case studies?

- What aspects of the classroom environment/culture help or hinder the process of critical thinking by hospitality management students?

Data were collected in Fall of 1995 from one class of 13 university students. These students were enrolled in a management course that focused on discussion of case studies.

Data were analyzed by constant comparative method. Basic ideas from selected phrases of data revealed 14 themes (case study, subject-matter knowledge, work experience, personal experience, empathy, open-mindedness, embedded assumptions, beliefs, values, personal ethics, norms of leadership, challenging justifications, acknowledging differences). These themes were organized by three components of critical thinking (information/ knowledge, critical spirit, reason assessment).

Findings revealed that students used case study information, subject-matter knowledge, work experience, and personal experience as evidence to justify their decisions. They knew where to get additional information to justify decisions, but rarely quoted evidence from these sources. They considered context of the situation and emphasized providing an immediate solution. A critical spirit was seen in students' empathy and open-mindedness. Decision making was influenced by their embedded assumptions, beliefs, values, and personal ethics as well as their accepted norms of leadership. Students rarely questioned differences in their own or other's assumptions. Data showed limited evidence that students assessed reasons given for decisions. However, they challenged others' ideas and acknowledged differences.

Helpful aspects of the classroom environment/culture were classroom seating, cooperation among students, and role the instructor played. Lack of preparation by students was considered a hindrance in facilitating the critical thinking process. Make-up of the group, expression of differences, and organization of the class were seen both as helps and hindrances.

It was concluded that the process of critical thinking easily could be made explicit to students as an enhancement to the problem-solving focus of the course. Practicing the critical thinking process in the safe environment of the classroom can enhance the intuitive process that managers use when making decisions in the "real world."

INTRODUCTION

A shift in students' expectations can be seen in higher education. Today, students are more concerned about being adequately prepared as career professionals than they are in being prepared as persons, family members, or citizens. Some older students enroll in university programs hoping to obtain marketable skills, whereas many young students search for job-specific training as part of their over-all educational program.

In this fast-changing world, people are also changing careers in a way that they have never done. According to Orndorff (2000), "the average worker in the 21st century is projected to change jobs at least seven times in their lifetime" (p. 4). The U. S. Department of Labor, Bureau of Labor Statistics (2001) reported that "individuals want to know what specific skills they will need to acquire ... their first job, to qualify for and succeed in their intended career, to gain a promotion, or to continue functioning effectively in their current job in a changing environment" (p. 38). The report also noted that "Employers are increasing their demand for workers with specialized skills" (p. 38). It is not uncommon for students to transfer from a somewhat general university program such as business to a more job-oriented curriculum such as hospitality management to acquire specialized skills. Students demand that learning experiences in the classroom enable them to progress quickly up the career ladder.

Hospitality management students have chosen professional management careers in organizations that provide food and lodging services to individuals and families away from home. These students come to universities to prepare themselves for a career in a changing world. They wish to obtain marketable skills so that they can influence the direction of that change. However, only when these students learn how to think, learn, and question will that be possible in a world with rapidly accelerating technology.

Hospitality is a growing industry that must compete in a global marketplace. Hospitality employers must be convinced that they can count on graduates of hospitality programs to transfer competencies and knowledge gained in the classroom to their organizations. The industry needs managers who are able to reason critically to confront the complexity of the everyday issues they face. Educators are obligated to encourage habits of

critical analyses by their students. As prospective hospitality managers, students should practice reflective, responsible, and sophisticated decision-making processes in making long-term decisions as well as taking on-the-spot actions. Educators need to provide learning experiences for prospective managers to refine and practice these good thinking skills as part of their formal education.

The development of critical thinking skills and independence of thought are two goals of higher education (College Board, 1983; Commission on the Humanities, 1980; Task Force on Education for Economic Growth of the Education Commission of the States, 1983). However, few educators take time to define how they will intentionally encourage these skills. Part of the problem lies in the lack of research that documents ways that students exhibit the use of critical thinking in the classroom.

Numerous writings (Brookfield, 1994; Ho, 1997; King & Kitchener, 1994; Paul, 1987; Robertson & Rane-Szostak, 1996; Schoeman, 1997; Shor, 1992; Sternberg, 1987; Swartz, 1987; Upchurch, 1995) published during the past 15 years have provided ideas about effective ways of teaching critical thinking. There also is literature concerning the generalizability of critical thinking skills (Ennis, 1989; Glaser, 1984; Langsdorf, 1986; McPeck, 1981, 1992; Norris, 1992; Paul, 1985; Perkins & Salomon, 1989; Resnick, 1987; Siegel, 1992; Swartz, 1984,1987). Numerous definitions of critical thinking have been proposed (Brookfield, 1991, 1994; Ennis, 1962, 1985a, 1987, 1991; Facione, 1990a; Glaser, 1941, 1985; Johnson, 1992; Kurfiss, 1988; Lipman, 1988a, 1988b; McPeck, 1981; Olson & Babu, 1992; Siegel, 1988, 1992; Taube, 1997; Walters, 1986, 1990, 1994; Warren, 1988). However, there are few studies documenting how students demonstrate critical thinking in the classroom. Very little is known about critical thinking from the perspective of hospitality management students.

One thinking skill, problem-solving, is required for hospitality-related jobs and is considered to be one of the most important competencies for prospective managers (Baum, 1991; Enz, Renaghan, & Geller, 1993; Partlow & Gregoire, 1993; Su, Miller, & Shanklin, 1997). Classroom discussions about case studies provide students a safe environment where they can solve problems and apply critical thinking to issues that are based on real-life situations. The question this research addresses is how hospitality management students

demonstrate the process of critical thinking in explaining and justifying their decisions in case studies presented in the classroom. This study did not determine whether critical thinking is generalizable, the most effective ways of teaching critical thinking, or whether there is one definition of critical thinking. The present study is a qualitative inquiry into critical thinking in one university-level management classroom. Therefore, the research questions for the present study are:

1. How do hospitality management students demonstrate the process of critical thinking when making decisions about management case studies?

2. What aspects of the classroom environment/culture help or hinder the process of critical thinking by hospitality management students?

REVIEW OF THE LITERATURE

It is essential that students graduating from academic programs leave not only with content or subject-matter of the course or program they have completed but also learn how to think and question in order for them to adapt to a changing world. The review of literature begins with an explanation of why critical thinking is important. The question of what is meant by critical thinking is described by different advocates. followed by a section on critical thinking in context that identifies the challenges related to teaching critical thinking. Finally, literature related to critical thinking in hospitality education is reviewed.

Need for Critical Thinking

In the 21st century. society's basic evaluation of success will center on information and on the individual's ability to manage this information. Society will depend on individuals with the ability to think. reason. solve problems. analyze. compare. absorb existing information. and create and distribute new information. Corporate literature of the early 1980s predicted an "information society" (Naisbitt. 1984) in which "the problem-solver. the decision-maker. and the creative thinker would have an advantage in the marketplace and on the career ladder" (Pauker. 1987. p. 10). Thus. there will be great opportunities in the workplace for those who are able to reason rationally.

Nickerson (1986) pointed out that it is a person's irrationality. not a lack of knowledge. that threatens human potential. Critical thinking advocates emphasize the importance of defending arguments and opinions with sound justification (reasons) and evaluating the justification (reasons) of others' arguments and opinions. According to these advocates (Barry. 1984: Johnson & Blair, 1980; McPeck, 1981: Nosich. 1982; Scriven. 1976), the ability to analyze arguments critically and correctly is a necessity for everyone in today's world.

Over the years. Benjamin Bloom's (1956) "Taxonomy of Educational Objectives. Handbook I: Cognitive Domain" has inspired some school districts in the United States to pursue the goal of teaching thinking. Persons becoming aware of students' inability to

formulate simple arguments identified the need to strengthen the curriculum by complementing reading, writing, and arithmetic with reasoning.

"Academic Preparation for College," a 1983 pamphlet published by the College Board, listed reasoning as one of the seven basic academic competencies. The Task Force on Education for Economic Growth appointed by the Education Commission of the States (1983) did likewise in "Action for Excellence." The Commission on the Humanities (1980) and the Carnegie Foundation's Ernest Boyer (1983) both placed heavy emphasis on critical thinking. The California State University system specified the study of critical thinking as a requirement for graduation. Several statewide testing programs also called for testing of thinking or critical thinking at various levels in the public schools. In elementary and secondary schools, emphasis was to be given to the upper three levels (analysis, synthesis, and evaluation) of Bloom's "Taxonomy of Educational Objectives" (Pauker, 1987). As a result, critical thinking that started as an elective or remedial component of the curriculum was accepted by most educators as both a pedagogical and necessary norm. The importance of critical thinking for general education also was affirmed by several other scholars (Farrell, 1981; Ferren, 1993; Higginbottom, 1995; Kiah, 1993; Nolte, 1991; Schor, 1993). Recent tests for critical thinking skills, self-report studies, and studies using other indirect indicators reported that growth in critical thinking skills at the college level had occurred (Astin, 1993; Ewell, 1993; Facione, 1990b; Pascarella, 1989).

Although the original three Rs were regarded as specific skill/competency areas, Siegel (1988) argued that reasoning be viewed as a guiding ideal of educational endeavor. Reasoning involves dispositions, habits of mind, and character traits as well as skills. Lipman (1984) also agreed that reasoning was not "the fourth R," but it is fundamental to development of the other three Rs. This is because students need to assume, suppose, compare, infer, contrast or judge, deduce or induce, classify, describe, define, or explain in order to read and write, as well as actively participate in classroom discussions. According to Lipman, to be truly educated, students must not only learn the content of the academic disciplines but also need to think in those disciplines.

Training in critical thinking is a necessary condition for fostering self-sufficiency in students, preparing them for responsible adulthood, and initiating them into the "rational traditions" of science, mathematics, history, and other subjects (Siegel, 1988). By training students to become good thinkers, educators hoped that they would be well prepared to compete effectively for educational opportunities, jobs, recognition, and rewards in today's world and would have a better chance of being successful in their chosen careers.

In a national survey of educators, employers, and policymakers conducted by The Pennsylvania State University in 1993-94, the consensus was that critical thinking skills and the disposition toward critical thinking were vitally important. The skills and disposition of critical thinking were necessary in workplace decision making, leadership, clinical judgment, and professional success. They were also necessary for effective participation in a democratic society (Jones, 1994).

The ability to think critically enables a person to ask and answer relevant questions at appropriate times: to discuss issues that generate differences of opinion; and to avoid serious mistakes in group, personal, or professional decision-making (Makau, 1990). The Socratic method, where nothing is assumed to be true until examined, is the best approach for examining ideas. This is because truth is established by cutting through false assumptions, misstatements of fact, and false logic (Schoeman, 1997). The critical thinking approach helps students to identify and challenge assumptions and values in the organization, to highlight the context in which action and practices occur, and to explore alternatives to a given situation (Brookfield, 1987). Learning to analyze arguments and evaluate them critically makes a person less vulnerable to manipulation and brainwashing, and should make the individual aware of the various approaches that are used to influence behavior and beliefs. Critically reflective persons would possibly challenge established ideas and ways of doing things, be capable of anticipating the consequences of their choices, and evaluate their options before they select among them.

In addition, good thinking is not only a prerequisite for academic excellence but also for good citizenship. According to Siegel, critical thinking is essential for citizens in a democracy. Glaser, E. M. (1985) also suggested that critical thinking ability "helps the

citizen to form intelligent judgments on public issues and thus contribute democratically to the solution of social problems" (p. 27). Therefore, being able to make good judgments is vital to one's role in society as worker, consumer, and citizen. Acquisition of listening skills, becoming observant, learning to look at controversial issues from other peoples' points of view all improve a person's social interaction in the society.

<div align="center">Conceptions of Critical Thinking</div>

The intellectual roots of the critical thinking movement can be traced further back than E. M. Glaser's (1941) "An Experiment in the Development of Critical Thinking." Many years before, Socrates discovered through a probing method of questioning that many of the authorities of his day could not justify their confident claims to knowledge on rational grounds. He desired to call all dogmas into question and was cautious of any easy attainment of certainty. Aristotle had described a rational society as consisting of "the good and just life" where all men were equal, where all might participate in the life of the community, and where all participated for the common good. The Aristotelian concept of politics provided the basis of Habermas's critique of society. All these early philosophical concepts were based on the idea that people are able to reason rationally.

In the 20th century, Habermas wrote about critical theory related to critical thinking. Critical theory was a sociological perspective developed by German intellectuals. It represents a synthesis of Marxism, phenomenology, and psychoanalysis (Kaplan, 1991). In "Knowledge and Human Interests," Habermas (1971) drew a very selective analogy between critical theory and psychoanalysis in which he seeks to show that the goal of each was self-understanding through self-reflection. Critical theory, therefore, is a reflective theory. It has "a fundamental interest in bringing to explicit consciousness the tension between what is and what ought to be" (Howard, 1992, p. 76). They suggest what ought to be addresses the concepts of freedom, justice, and equity for all. For Habermas, all affected by an action must be part of the dialogue of determining the performed action (Habermas, 1990). Critical theory places the political realm into the critical thinking arena. According to Kaplan (1991),

"Critical theory provides a critique of lived social and political realities with the aim of changing those realities to allow greater freedom of thought and action" (p. 362).

Characteristics of Critical Thinkers

The word critic came from the Greek word krinein (Webster's New Collegiate Dictionary, 1979); a critic was a person who judged. appreciated. and estimated the value of something. Philosopher John Dewey (1933) defined reflective thinkers as persons who carefully and persistently examine an action. proposal. or belief and use knowledge to judge consequences and possible solutions. Critical thinkers were characterized by their ability to use specific terminology. to refrain from overgeneralization. and to support their assumptions with valid data (Ennis. 1985b). According to Sternberg (1987). a good thinker not only has the right thought processes. but also knows how to combine them into workable strategies for solving problems. A good thinker also has adequate mental representations of the information in the environment. has an adequate knowledge base. and has motivation to use these thinking skills.

Siegel (1988) classified a critical thinker as a person "appropriately moved by reasons" who "has a propensity and disposition to believe and act in accordance with reason. [and]... has the ability to properly assess the force of reasons in the many contexts in which reasons play a role" (p. 23). "To be a rational person is to believe and act on the basis of reasons. There is then a deep conceptual connection. by way of the notion of reasons. between critical thinkers and rational persons" (p. 32). Therefore. he claimed that a critical thinker was "a rational actor" and possessed features such as "dispositions. inclinations. habits of mind. and character traits" (p. 41).

Paul and Nosich (1991) also observed that a critical thinker possessed "a set of traits of mind" including "independence of thought, fair-mindedness. intellectual humility. intellectual courage. intellectual perseverance. intellectual integrity. curiosity. confidence in reason. the willingness to see objections. to enter sympathetically into another's point of view." and "to recognize one's own egocentricity or ethnocentricity" (p. 5). Facione (1991) identified the ideal critical thinker as follows:

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 circumstances of inquiry permit. (p. 14)

Different Aspects of Critical Thinking

Critical thinking belongs to a network of terms including problem solving, decision
making, metacognition, rationality, rational thinking, reasoning, knowledge, and intelligence
(Norris, 1992). The concept of critical thinking originally referred to evaluating things
analytically using the concepts of logic. In recent years, critical thinking has been viewed in
a broad sense as having some of the same aspects as creative thinking, problem solving, or
decision making (Pauker, 1987). Some people use critical thinking in the broad sense and
some use it in the narrow sense of analytical evaluation only.

Ennis's definition equated critical thinking with rational thinking. However, he
specifically noted that his definition did not exclude creative thinking and that critical
thinking is related to problem solving (Ennis, 1987). In an interview with Brandt, Perkins
supported the concept that the creative thinker has to be critically aware, because creative
thinking means creating, sifting, and reworking of possibilities. That has to be a critical
process (Brandt, 1989). Perkins believed that critical and creative thinking were not
antagonistic but correlated. Having a "critical spirit" (or "critical disposition") is as
important in critical thinking as having certain skills (Norris, 1985). Both abilities and
dispositional aspects are included in critical thinking. Therefore, Warren (1988) suggested
that "creative thinking, passion, and empathy may play important roles in 'reasonable
reflection' about what to do or believe" (p. 156).

Psychologists such as Piaget who study intellectual development cite logical
reasoning as one aspect of general intelligence. He put logical reasoning within the last stage
of development, i.e., formal thought. Sternberg's theory of intelligence describes the three
basic mental processes of knowledge acquisition, performance, and executive processing.
Within these basic components, the subroutines of analysis, comparison, inference, and

evaluation play essential roles (Sternberg, 1985). Guilford (1956), too, offered a set of skills as components of intelligence. Of the 120 abilities in his structure-of-intellect model, the areas of cognition, evaluation, and convergent and divergent production all present tasks that require sets of reasoning skills.

Definitions of Critical Thinking

Some theorists presumed that critical thinking was an educational value that should be defined to best promote desired educational goals. Other theorists believed that the meaning of critical thinking should be based upon evidence from empirical research about how people think when faced with different kinds of tasks (Norris, 1992). The latter concept will be examined here.

Critical thinking is definable in terms of three functional characteristics: "an attitude of being disposed to consider in a thoughtful way the problems and subjects that come within the range of one's experience; knowledge of the methods of logical inquiry and reasoning; and some skill in applying those methods" (Glaser, E. M., 1941, p. 5; Glaser, E. M., 1985, p. 25). Glaser, E. M. (1941) argued that formalistic rules of "logical inquiry and reasoning" enabled practitioners of critical thinking "to consider in a thoughtful way the problems and subjects that come within the range of one's experiences" (p. 5). He co-authored the Watson-Glaser Critical Thinking Appraisal (1980), which provided an objective measure of critical thinking ability by using five 16-item subscales: inference, recognition of assumptions, deduction, interpretation, and evaluation of arguments.

In his influential manuscript, "A Concept of Critical Thinking," Robert Ennis (1962) defined critical thinking as "the correct assessment of statements" (p. 83). He offered both a list of aspects of statement assessment and criteria for the correct assessment of various sorts of statements. Although Ennis (1962) identified 12 key critical thinking skills and Browne, Haas, and Keeley (1978) provided a similar set of 8 critical thinking skills, the dispositional component of critical thinking was not addressed by these researchers. The list developed by Ennis (1985b, 1987) for the Illinois Thinking Project called "Goals for a Critical Thinking/Reasoning Curriculum," served as the basis for the well-known Cornell Critical Thinking Test. The California and Connecticut Departments of Education used this test in

the development of their statewide assessments of critical thinking. The central categories of skills that Ennis (1985b, 1987) delineated involve clarifying ideas and reasoning, determining the accuracy of basic information (through observation and communication), and reasoning and inference that could extend beliefs and knowledge (through the use of evidence and deduction). Dick (1991) also outlined a taxonomy of 15 critical thinking skills organized into 5 categories: identifying arguments; analyzing arguments; evaluating external sources; using scientific analytical reasoning; and combining reasoning and logic.

In later publications, Ennis acknowledged the role that dispositional factors played in critical thinking by including the ability as well as willingness to utilize logical techniques in good thinking. He defined critical thinking as reasonable reflective thinking focused on deciding what to believe or do (Ennis, 1985a, 1987, 1991). Therefore, Ennis's goals for a critical thinking curriculum included dispositions or tendencies (e.g. open mindedness and staying informed) and abilities or skills (e.g. clarifying questions, terms, and assumptions; assessing sources' credibility; reasoning logically; and detecting or using persuasive strategies). His latest conception includes 12 critical thinking dispositions and 16 critical thinking abilities (Ennis, 1991). The critical thinking abilities were closely related to those outlined by Browne et al. (1978), Dick (1991), and Ennis (1962). Taube (1997) also concluded from his own research that it is essential to consider both ability and disposition when attempting to foster an individual's critical thinking. However, research was needed to define the relationship and nature of the interaction between them (Facione, Sanchez, Facione, & Gainen, 1995; Taube, 1997).

On the other hand, Lipman (1988b) and Siegel (1988) pointed out there are three separate but related components of critical thinking: reason assessment, critical spirit, and information/knowledge. The reason assessment component involves abilities and skills relevant to the proper understanding and assessment of reasons, claims, and arguments. The critical spirit component involves a complex of dispositions, attitudes, habits of mind, and character traits. The information/knowledge component involves subject-matter knowledge and background knowledge or information on a particular area of investigation.

Facione et al. (1995) stressed that a critical thinking disposition is the tendency to use one's critical thinking skills and did not directly address one's actual degree of skill. The California Critical Thinking Dispositions Inventory (CCTDI), developed by Facione and Facione (1992) as a measure of critical thinking dispositions, includes seven subscales. They are: *truth-seeking* (the disposition to seek the truth, ask questions, and be honest and objective about pursuing inquiry even if the findings contradict one's interests or opinions); *open-mindedness* (the tendency to be tolerant of divergent views and sensitive to one's own bias); *analyticity* (being alert to potentially problematic situations, anticipating possible results and consequences, and prizing the use of reason or evidence); *systematicity* (tendency to be organized, orderly, focused, and diligent in inquiry); *self-confidence* (trust in one's own reasoning processes); *inquisitiveness* (intellectual curiosity); and *maturity* (the disposition to make reflective judgments). According to Siegel (1992), the dispositions needed are:

... the dispositions to seek reasons and evidence in making judgments and to evaluate such reasons carefully in accordance with relevant principles of reason assessment; attitudes, including a respect for the importance of reasoned judgment and for truth, and a rejection of partiality, arbitrariness, special pleading, wishful thinking, and other obstacles to the proper exercise of reason assessment and reasoned judgment; habits of mind consonant with these dispositions and attitudes, such as habits of reason seeking and evaluating, of engaging in due consideration of principles of reason assessment, of subjecting preferred reasons to critical scrutiny, and of engaging in the fair-minded and nonself-interested consideration of such reasons; and character traits consonant with all of this. (p. 105, 106)

McPeck (1981) argued that critical thinking could be described as "the propensity and skill to engage in an activity with reflective scepticism" (p. 152) within the problem area under consideration. He argued that critical thinking involves both the generation (discovery) and the evaluation (justification) of theories and arguments. The author distinguished between them as follows: "the context of discovery concerns those thought processes that are involved in forming (or generating) a hypothesis, whereas the context of justification is concerned with the acceptability of proofs of hypotheses once they have been put forward"

(p. 14, 15). He pointed out that logic is of use only for the evaluation (justification) of theories and arguments.

McPeck argued that there were no definitive criteria for determining whether a fallacy had been committed, that there was judgment involved in determining what was going to count as an assumption, and that background knowledge would play a role in how an argument was assessed. Scriven (1976) also acknowledged that assumption hunting in the analysis of argument was not a mechanical process but required imagination and creativity on the part of the analyst. Although McPeck (1981) did not disagree with Scriven that critical thinking involved creativity and imagination, he asserted that these were the "antithesis of method" (p. 91), meaning they cannot provide a positive method for argument analysis. McPeck (1981) pointed out that "... the best assessment of arguments usually comes from people with the most information about a subject and not from those merely skilled in argument analysis" (p. 93).

Kurfiss (1988) defined critical thinking as an "investigation whose purpose is to explore a situation, phenomenon, question, or problem to arrive at a hypothesis or conclusion about it that integrates all available information and that can therefore be convincingly justified" (p. 2). Moreover, all assumptions are open to question, divergent views are aggressively sought, and the inquiry is not biased in favor of a particular outcome. Kurfiss agreed with McPeck that a conclusion (or hypothesis) and the justification offered in support of it are the outcomes of a critical inquiry, and she pointed out that they are usually in the form of an argument.

For Siegel (1988), a rational or "critical thinker is one who appreciates and accepts the importance, and convicting force, of reasons" (p. 33), "i.e., of reasons which actually have convicting force and which warrant conviction" (p.149). He suggested that critical thinking was "best conceived, ... as the educational cognate of rationality: critical thinking involves bringing to bear all matters relevant to the rationality of belief and action; and education aimed at the promulgation of critical thinking is nothing less than education aimed at the fostering of rationality and the development of rational persons" (p. 32).

Lipman (1988a) pointed out that contemporary definitions of critical thinking stressed outcomes that were limited to solutions and decisions but generally failed to note its essential characteristics. He argued that critical thinking is "skillful. responsible thinking that facilitates good judgment because it (1) relies upon criteria. (2) is self-correcting, and (3) is sensitive to context" (p. 39). The competent use of respected criteria (reliable reasons) is a way of establishing the objectivity of a person's prescriptive. descriptive. and evaluative judgments. For Lipman, critical thinking is a sort of cognitive accountability. Johnson (1992) also stated that critical thinking is the articulated judgment of an intellectual product arrived at on the basis of plus-minus considerations of the product in terms of appropriate standards or criteria. In his treatment of argument analysis. Scriven (1976) included the need for discrimination, for assessing both strengths and weaknesses in an argument and arriving at a judgment that reflected these considerations.

The Committee on Pre-College Philosophy of the American Philosophy Association conceptualized "critical thinking to be 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" (Facione. 1990a. p. 3). Brookfield (1991. 1994) saw critical thinking as a "learning process." It is "a process by which people become aware of the assumptions underlying their habitual actions, ideas, judgments and reasoning. and by which they examine these assumptions for their accuracy and validity." It "...is observable across the contexts of adulthood and manifests itself differently according to a host of contextual variables" (Brookfield. 1991. p. 6).

Issues Concerning Teaching of Critical Thinking

One difference among advocates of critical thinking appears to center around the issue of whether the skills involved in critical thinking are general/generalizable. One group thought that if learned. the skills in one area of content could be easily transferred and used in another area of content. According to the generalizability thesis. critical thinkers have abilities and dispositions that are generalizable across subjects. Concerning abilities. Dewey (1933) said, "The various ways in which men do think can be told and can be described in

their general features" (p. 3). Concerning dispositions, he said. "There is such a thing as readiness to consider in a thoughtful way the subjects that do come within the range of experience - a readiness that contrasts strongly with the disposition to pass judgment on the basis of mere custom, tradition, prejudice, etc., and thus shun the task of thinking" (Dewey, 1933, p. 34). According to Norris (1992), Dewey seemed to have been a generalist about both critical thinking abilities and dispositions.

However, another group holds that critical thinking abilities and dispositions are subject specific. This idea holds that different sorts of things count as good reasons in different fields, so critical thinking varies from field to field. It was based on the belief that "each discipline has characteristic ways of reasoning" (Resnick. 1987. p. 36). This belief was supported by Swartz (1984). McPeck (1981) suggested that "thinking is always thinking about something" (p.3). Paul (1985) argued this was like assuming that because when we write and speak, we are writing or speaking about something, there can be no teaching of general writing or speaking skills. Siegel (1985) made a similar point. But McPeck (1985b) replied that writing and speaking are different from critical thinking, and Paul had not shown that what held for writing and speaking also held for critical thinking.

Advocates of epistemological subject specificity maintain that what constitutes a good reason varies from field to field. Advocates of domain specificity note the importance of deliberate teaching for transfer and the use of examples in many different areas. Proponents of both epistemological subject specificity and domain specificity acknowledge the importance of background knowledge (Ennis. 1989). Ennis agreed with McPeck (1985b) that reasons and principles of reason assessment vary from field to field. He also noted the existence and importance of "interfield commonalities" and called for research concerning the extent of such critical thinking commonalties (Ennis, 1989). Use of informal logic infers that the content of critical thinking be offered in a separate course or as a part of a course rather than infused in other subject matter areas. Ennis (1987) pointed out that critical thinking posed no such limitation.

However, Siegel (1992) argued that the principles of reason assessment are likely to differ as much within fields as among them, and hence they are not field specific. That is,

what counts as a good reason from field to field is basically the same. What counts as a good reason for some claims depends not on the field in which the claim is made, but on the type of claim it is and the possible sorts of evidence needed to justify it. Therefore, Siegel concluded that the epistemology underlying critical thinking is central to the coherent conceptualization of critical thinking and is fully generalizable. Skills and criteria that comprise a portion of the reason assessment component of critical thinking are partly generalizable. Critical spirit is fully generalizable. It is true, "…both that certain specialized criteria of reason assessment are restricted to particular fields, and that specialized content knowledge is frequently required in order to think critically, [but] it seems nevertheless to be the case that critical thinking is overwhelmingly generalizable" (p. 107).

Nevertheless, one cannot expect someone who is ignorant in a field to be good at making and judging the best explanations and making appropriate inferences. Psychologists offered evidence to show that knowledge of subject, and not some generalized ability to think well, is what differentiates experts from novices in a variety of fields (Glaser, R., 1984; Larkin, McDermontt, Simon, & Simon, 1980). Evidence also was presented to show that teaching general, context-independent thinking strategies did not help outside the specific domains in which they were taught (Perkins & Salomon, 1989). Faculty members' intimate familiarity with the questions and methods of their disciplines would seem to put them in an ideal position to help students acquire the needed skills. On the other hand, an experienced person could become so well informed about and rigid in an area that the person might stop thinking, become inflexible, and therefore unable to realize and consider alternatives. In addition, most of the subject-matter knowledge memorized by students often is not understood deeply enough to enable them to question assumptions and think critically in the subject. The ability to think logically in a particular area probably does not lead necessarily to critical thinking in everyday life.

There are three approaches to teaching critical thinking: general approach, infusion approach, and immersion approach. In the general approach, critical thinking is taught as a separate course. It can be taught as an infusion approach through deep, thoughtful, well-understood subject-matter instruction in which students are encouraged to think critically in

the subject. General principles of critical thinking dispositions and abilities are made explicit in the infusion approach. Proponents of this approach include Glaser, R. (1984, 1985), Resnick (1987), and Swartz (1984, 1987). Another approach is immersion. which is a thought-provoking kind of subject-matter instruction in which students become deeply immersed in the subject, but general critical thinking principles are not necessarily made explicit (Norris, 1992).

Concerning the teaching of critical thinking. McPeck (1981) argued that critical thinking is discipline specific because it depends on knowledge of what constitutes good reasons in a discipline. and this requires extensive knowledge of the subject matter. He concluded that critical thinking is not a generalized skill and that instruction in critical thinking without a solid foundation of specialized knowledge tends to "underestimate and play down the real complexities that usually underlie even apparently 'common' or 'everyday' problems" (p. 156).

McPeck (1992) expressed the view that one's ability to think critically, or to apply the rules of logic in real-life situations, is a direct function of one's familiarity with the kind of subject matter under discussion. He pointed out that knowledge is not necessarily limited or constrained by where it is learned. According to McPeck, subject-matter knowledge learned in school is to enlighten people about their current everyday world.

Critical thinking, like any thinking, is necessarily connected to particular objects of thought. Because objects of thought can and do differ enormously in scope. quality. and variety. McPeck (1992) claimed that there can be no one general skill or limited set of skills (including formal logic) that can do justice to this wide variety of objects of thought. He believed there are a very limited number of general thinking skills. The more general they are, the more trivially obvious they are. The truly useful thinking skills tend to be limited to specific domains or narrow areas of application (Glaser, R., 1984).

There remains the problem that Evans (1982) documented. even when a person possesses a skill that might be applicable in a new or different situation, there is the problem of seeing or recognizing that the skill applies in this situation. He urged a distinction be made between skills and their domains of application. Some skills. such as counting, and

their accompanying abilities may be very narrow when looked at as a skill, per se, yet the domain to which the skills apply can be very broad. Thus, the skill as such is not general, but its domain of application is. Other skills may be quite general, but have only narrow applicability. McPeck (1985a) argued that when it came to the teaching of school subjects, he favored an explicit emphasis on those epistemological questions that undergird the various school subjects. He agreed with Glaser, R. (1984) that the crucial epistemic questions tend to vary among domains and subjects. McPeck concluded that it would be more accurate to describe his position, along with Glaser's, as the "infusion" approach to instruction in critical thinking.

As noted above, there is disagreement among experts as to whether there should be a free standing critical thinking course. Ennis's (1989) advocacy of the "mixed" approach clearly was addressed to the practical, pedagogical question of how best to teach critical thinking. Siegel's (1992) arguments for gemeralizability were aimed at the theoretical issue of applicability.

Most stand-alone programs designed to teach thinking skills teach general frameworks related to critical thinking. However, efforts to integrate the teaching of thinking skills with subject matter can offer much more field-specific thinking frames that can boost performance in particular fields. Deciding which to attempt, or whether to try both, depend on priorities and available resources (Perkins, 1987). Whichever approach is chosen, an institutional commitment is critical.

Shor (1992) added a political element to the teaching/learning issues of critical thinking. He proposed a pedagogy described as "empowering education" where "the learning process is negotiated, requiring leadership by the teacher and mutual teacher-student authority" (p. 16). Shor's "dialogic pedagogy" is "a critical-democratic pedagogy for self and social change" (p. 15). Its goals are to "relate personal growth to public life, by developing strong skills, academic knowledge, habits of inquiry and critical curiosity about society, power, inequality, and change" (p. 15). This could be considered as a type of social engineering.

Shor (1992), in working with college students, found that many were focussed on preparation for their careers. They were uncomfortable with the idea of gaining knowledge for social change and for intellectual and emotional development rather than for financial gain. The hectic pace of life interfered with deliberate and thoughtful scrutiny of critical dialogue. In addition, the students believed that critical thought (questioning the status quo) appeared irrelevant to making money and was even risky in school and at the work place. Therefore, educators are obligated to explore with learners how their critical thinking efforts can have the maximum effect with the least possible negative consequences for themselves (Brookfield, 1991). This will challenge the way teachers teach. Ho (1997) also looked at reactions of first-year computer students to tasks involving different degrees of reflectivity and found that students preferred clear and direct input from the teacher to self-discovery tasks. This study included 41 students in the intervention group and 40 students in the comparison group. Students found analytical and reflective tasks more difficult and less interesting than teacher-directed tasks. However, they found all tasks, including the reflective tasks, helpful and relevant.

Critical Thinking in Context

Instruction in critical thinking emphasizes the analysis of arguments. However, it is necessary to consider not only the process of thinking but also the person who is thinking and the context in which thinking arises. Some scholars have questioned the oversight by conventional critical thinkers of the imaginative and contextual ways of thinking.

Teaching students a foundation of criticism of the world around them can be traced back to the work of Paulo Freire. Paulo Freire (1970), author of "Pedagogy of Oppressed," opposed "the banking concept of education," in which "education...becomes an act of depositing, in which the students are the depositories and the teacher is the depositor" (p. 58). He opposed the concept of education where teachers are the active subjects and students are the passive objects. Instead, Freire's model of education recommends that students be autonomous actors throughout the learning process. Hersh (1997) also believed that the most practical education was "one that is transformative and liberating, one that helps students

transform dependence into autonomy, sustains self-initiative, and breeds the humility that catalyzes further learning" (p. 33).

However, in critical thinking, justification is offered through argumentation, that is, analysis of arguments through discourse. The purpose of argumentation is not to prove one's own point of view, or to disprove another's, but to arrive at a conclusion by rational consensus. Curtler (1993) said, "Conclusions ... are only as strong as the reasons that support them and the argument itself [is] only as strong as the connections between reasons and conclusion" (p. 93). McPeck (1981) and Walters (1986) argued that thinking involves more than argumentation.

Courses in critical thinking teach students two skills, i.e., to identify arguments and to evaluate arguments (Kaplan, 1991). According to Kurfiss (1988), using article-length texts trained students to identify the claim being made (the conclusion of the argument) and the reasons offered in support of the claim (the arguments' premises), and then asked students to apply logical analysis. Students usually checked arguments against a list of "informal fallacies" such as "appeal to authority," "appeal to pity," and "inconsistency" and rejected any argument that contained one of these. Kurfiss concluded that "critical thinking courses emphasize the context of justification but neglect the context of discovery which is the source of both hypotheses and alternatives in real world reasoning" (p. 22).

If students are trained only to decide between two or more given arguments in which they have no personal interest and even less commitment, they are not being prepared to deal with "real world" situations. If students only criticize and are not responsible for producing alternatives, they are not learning to reason independently but to analyze the reasoning of others. Students should to be able to create alternatives, not merely to choose among them. In real life, there is little opportunity to select among clear-cut options. Most of the time, there are no clear options at all.

According to Paul (1990), ill-structured problems are multilogical problems because alternative frames of reference are competing for their solution. Ill-structured problems result when the acts open to the decision-maker, the status of nature, possible outcomes, or the utility of the outcomes are unknown or are not known with a high degree of certainty (Wood,

1983). King and Kitchener (1994) argued for a theoretical aspect of critical thinking. They observed that when one begins with an awareness of uncertainty, then one must integrate and evaluate data, relating those data to theory and well-formed opinion, and ultimately create a solution to the problem that can be defended as reasonable or plausible. They called this reflective judgment. Two major differences between the description of critical thinking and the conception of reflective judgment are the epistemological assumptions on which the thinking person operates and the structure of the problem being addressed. Thus, a person's cognitive characteristics (epistemic assumptions) play a key role in his or her ability to engage in reflective judgment.

The conventional critical thinkers overlook the contextual ways of thinking. What was ignored was that reasons were contextual. What might be a good reason in a tearoom conversation might be a poor reason in a formal courtroom negotiation. Warren (1988) argued, therefore, that critical thinking must be understood as essentially contextual, i.e., sensitive to the conceptual framework in which it is conceived, practiced, and learned or taught. Each person operates out of a frame of reference, world view, or what Warren called a conceptual framework, i.e., a set of basic beliefs, values, attitudes, and assumptions that explain, shape, and reflect a view of one's self and one's world. Conceptual frameworks are influenced by such factors as sex/gender, class, race/ ethnicity, age, and nationality. Conceptual frameworks determine not only what is thought about but also how thinking is done. The extent of one's willingness and ability to be open-minded about issues is significantly affected by the conceptual framework out of which one operates.

Styles of thinking as well as ideas themselves are connected with broad, complex environments of discourse, place, time, value, and worldview. To neglect these environments is to limit the function and range of thinking in an unwarranted way (Walters, 1994). Therefore, to think critically about some issues, one must question all relevant assumptions. Ennis (1981) indicated that one tendency a rational thinker displays is to "take into account the total situation" (p. 145). Whether the goal of critical thinking has undesirable implications depends on what is thought about critically. The political ramifications of critical thinking also depend on how it is thought about. McPeck (1981) said

that "learning to think critically is in large measure learning to know when to question something, and what sorts of questions to ask" (p. 7).

It does not necessarily indicate a critical thinking deficiency when inferences do not agree with those sanctioned by a test or with those a teacher might make. When the problems of transfer regarding effective teaching/learning of critical thinking are considered, sensitivity should be given to context. Making inferences is sensitive to context, i.e., the learner's background or prior knowledge, assumptions, experiences; whether the environment feels safe; and the nature of his/her everyday life. Therefore, differentiation should be made between deficiencies in thinking ability and differences in background assumptions and beliefs of the examiner and examinee.

An evaluation of standard critical thinking texts found that they either completely ignored or only slightly mentioned conceptual issues (Walters, 1989). These texts concentrated instead upon providing rules for the analysis of arguments and exercises to train students in their concrete application. Kurfiss (1988) pointed out, "Teaching critical thinking, at least at the introductory level, has become synonymous with the methods of applied informal logic" (p. 14). Walters (1994) argued that an accepted approach to critical thinking "... conveys the message to students that thinking is legitimate only when it conforms to the procedures of informal (and, to a lesser extent, formal) logic and that the good thinker necessarily aims for styles of examination and appraisal that are analytical, abstract, universal, and objective" (p. 1). He found problematic the claim that logical thinking was the only mode of good thinking and logical technique was the only method for determining the justifiability of claims.

Good thinking by students should incorporate the ability to analyze critically arguments and knowledge claims that are made. It also requires the capacity to envision alternative ideas, paradigms, and problems. Walters (1990), therefore, argued that logical inference, critical analysis, and problem solving are fundamental qualities of good thinking, only if they are complemented by the cognitive functions of imagination, insight, and intuition that are essential components of the pattern of discovery. Hence, accommodating

the presence of ambiguity and paradox in analysis of arguments cannot be dismissed as sloppy thinking.

Paul (1982) argued that teaching critical thinking as an application of techniques in instrumental reasoning is not the best way to structure educational interactions. He preferred cultivating the "dialectical mode of analysis" where the Socratic form of reasoning called self-reflective judgment is practiced. For Paul (1989), critical thinking is disciplined. self-directed thinking that exemplifies the perfection of thinking appropriate to a particular mode or domain of thinking. Langsdorf (1986) and Warren (1988) also concluded that personal enlightenment is an important goal for the critical thinker. However. Phelan and Garrison (1994) pointed out the need to see the individual as a community member. Johnson (1992) reminded us that many theorists called for self-criticism as part of the profile of the critical thinker. However, these theorists did not make it sufficiently clear just what this meant and to what degree it was possible for an individual thinker to satisfy this demand. Thus, the idea of critical thinking as self-corrective has the risk of placing too much emphasis on the individual and not enough on the community within which that individual practices reflection.

On the one hand, students are trained to be fair-minded by separating personal considerations from claim investigation and argument appraisal. Martin (1992) pointed out that critical thinking demands the thinker establish distance from the problem under consideration. That is. objectivity is emphasized. On the other hand. thinking is always performed by an individual who approaches decision-making and claim appraisal from his/her own personal perspective. Paul (1987) pointed out that a human being's primary egocentric nature is a complex mixture of beliefs. values. drives. and assumptions. It generates a total frame of reference through which he or she comes to perceive, think, and judge. Therefore, emphasizing only analytical skills might improve a student's ability to justify beliefs already held without significantly improving a disposition to weigh evidence by looking at different points of views. If critical thinking is taught in the "strong" sense. students will "explicate, understand, and critique their own deepest prejudices. biases, and misconceptions"(p. 140). This will allow them to "discover and contest their own egocentric

and sociocentric tendencies" (p. 140). Paul (1987) advocated selecting complex issues that students care about and that "engage their egocentric thoughts and beliefs" (p. 140). Then one can foster "dialogical" thinking about the issues by insisting that students "argue for and against ... every important point of view and each basic belief or conclusion that they are to take seriously" (p. 140). Robertson and Rane-Szostak (1996) also recommended classroom dialogue as an effective strategy for both teaching and applying critical thinking skills.

According to Paul (1989), critical thinking is dialogical and heavily dependent on moral character. He explained the extent to which critical thinking depends on the capacity of the individual to become aware of egocentric and ethnocentric thinking, the tendency for self-deception, and hence the moral character required for critical thinking. Kanpol (1994) also stated that critical pedagogy requires decisions that are consciously moral and political. For Grant (1996), training in critical inquiry is moral education as well as an education in independence of the mind. He argued that "the experience of critical inquiry conducted through classroom dialogue can cultivate precisely those ethical characteristics required of participants in the public life of a deliberative democracy" (p. 470). This is based on the recognition that there is an ethical dimension to conversation.

According to Olson and Babu (1992), the central issue that should be guiding critical thinking research is not what abilities, skills, and dispositions people have, but how people represent situations. They attributed the emphasis on abilities, skills, and dispositions to the fact that much of the critical thinking discourse is philosophical rather than psychological. Therefore, it should be no surprise that it describes ideal behavior better than it characterizes actual human behavior. General principles may be useful in theoretically characterizing how people ought to think, but it is a mistake to infer from this that they represent the rules by which people do think. Olson and Babu said that in the speech act (what is said) and the mental state (what is thought), terms such as "say," "mean," "intend," "infer," "assume," and the like are used to characterize personal thoughts and the thoughts of others. They suggest that critical thinking is reflection on and analysis of what people said. Therefore, they defined "... critical thinking as the analysis or interpretation of assertions rather than as the

analysis of statements" (p. 185). This confirms that communication and listening are important human behaviors, particularly for success in chosen careers.

Critical Thinking and Hospitality Education

Educational institutions, including those providing hospitality education, need to teach the skills of application, analysis, synthesis, and evaluation of information, because higher-order cognitive thinking capability is needed by students. However, what has been found in the classroom was mostly representative of the first two (knowledge and comprehension) of six levels in Bloom's (1956) Taxonomy of Educational Objectives, Handbook I: Cognitive Domain. Giroux (1989) found that in four out of six undergraduate college classes studied, student observers (with junior or senior standing) perceived the learning environment to be focused on knowledge and comprehension at least 96 percent of the time. Higher levels of thinking/learning (application, analysis, synthesis, and evaluation) occurred in the other two classes at least 18 percent of the time. Active learning approaches such as student-centered activities, out-of-class assignments, and case studies have been found to contribute to the development of students' communication and problem-solving skills as well as to their critical thinking ability (Sivan, Leung, Gow, & Kember, 1991).

In a recent study, it was found that hospitality-related jobs required thinking skills such as troubleshooting and problem solving. Employers in the industry also preferred entry-level job applicants who knew how to learn and who demonstrated problem-solving skills. Increasing problem-solving skills of hospitality students might increase their earning power as well. Ten management skills important for effective service management were considered to be: problem-solving; creative decision-making; the ability to set goals for quality service; leadership; oral and written communication; the ability to adapt to change and manage stress; time management; the ability to train, develop, and evaluate employees; the ability to listen and delegate; and the ability to develop teamwork and good employee relations within an organization (Su, Miller, & Shanklin, 1997). According to hospitality faculty, industry professionals, and alumni, written communication and problem-solving skills were rated among the most important competencies that a graduating student or management trainee

must possess (Baum, 1991; Enz, Renaghan, & Geller, 1993). Graduates from graduate hospitality education programs also recognized the importance of written communication and problem solving as major components of the curriculum and their career success (Partlow & Gregoire, 1993).

Upchurch (1995) believed that hospitality educators should emphasize "instructional strategies that focus on skills and abilities that adequately prepare students for a management career" (p. 5). An activity called Microtheme is an effective instructional strategy for this. It is defined as "a writing-to-learn strategy that engages the student in research, discussion, experiential learning, and expository writing on a specific topic" (p. 6). This writing activity actively engaged students in critical thinking and enabled them to apply critical thinking to issues that were based on real-life situations.

Decisions involving interactions with people are associated with ill-structured problems. They are controversial and demand more than one solution. O'Halloran (1995) incorporated reflective judgement techniques in hospitality management classes at the undergraduate level. He suggested that educators first assess the learning level of the course being offered and then measure the level of students' abilities at the beginning of the course. The learning level of the course is based on Bloom's Taxonomy of Educational Objectives (1956): knowledge, comprehension, application, analysis, synthesis, and evaluation. Then, concepts of ill-structured problems can be introduced and support measures provided such as more office hours, review sheets, and structures that encourage expression of different opinions. O'Halloran believed that providing support measures would create an environment that allows reflective thought. At the same time, student progress in using reflective judgment could be monitored using a pretest-posttest model.

Changes in technology and the marketplace can make specific situations irrelevant and can outdate the hospitality curriculum rapidly. Thus, Palmer (1982) urged hospitality educators to place more emphasis on teaching problem-solving skills applicable to a range of business situations rather than teaching solutions to specific situations. Because business problems are not predictable and are not clearly defined, Haywood (1987) also wanted hospitality courses to focus on solving business problems that deal with unpredictable

consequences. Hospitality students first need to recognize problems that are worth solving. They should be taught to challenge underlying assumptions and values of stated positions introduced in the classroom and to recognize the human tendency to introduce unnecessary constraints into the definition of a problem. According to Haywood, students need to be exposed to ill-structured problems in order for them to see the contextual nature of problems. When working in groups, students should be able to see problems from a variety of perspectives and to recognize different biases displayed by different people. Because sufficient information may not be available, students need to know how to acquire and use necessary knowledge and to use intuition along with formal knowledge (theory). He also recommended that students need to take responsibility and ownership for their decisions because solutions cannot be separated from consequences associated with real-life problems. It is also useful for students to learn not only to solve the problem but also to convince other people of the correctness of a solution.

Gilmore (1992) found that the class discussion process required when using the case method of instruction could be an effective educational tool. She found that students' attitudes were positive regardless of their grade-point averages. Her study indicated that class discussion helped students to appreciate other students' opinions, to find new alternative solutions for the case and/or reaffirm their opinions about the case. Most students could make judgments about what they had read, heard, or seen in the classroom. However, not all students thought alike, and they did not all come to the same conclusions about a given situation.

In summary, the critical thinking process dates back as far as the Socratic debates in the writings by Plato. Educators such as John Dewey (1933) and Benjamin Bloom (1956) emphasized the importance of teaching higher-level thinking skills in schools. Several measurement devices such as the Cornell Thinking Skills Test (as cited in Ennis, 1985b, 1987), the Watson-Glaser Critical Thinking Appraisal (1980), and the Critical Thinking Disposition Inventory (as cited in Facione & Facione, 1992) have attempted to measure various aspects of critical thinking.

Numerous writers have outlined definitions of critical thinking and characteristics of critical thinkers (e.g., Brookfield, 1991, 1994; Ennis, 1962, 1985a, 1987, 1991; Paul, 1989,1991; Shor, 1992; Siegel, 1988, 1992; McPeck, 1981). A 20th century philosopher, Jurgen Habermas (1971, 1990), has written about critical theory, aspects of that have been adopted by some of the above writers. Habermas also introduced the concept of "what ought to be" to add to the concept of "what is."

Studies in hospitality management embrace the need for managers to possess critical thinking skills. These skills are useful to enable them to solve problems on the job. Consequently, students need to learn about the critical thinking process and how they can use that knowledge to make decisions in the workplace. Educators working with these future managers can incorporate this type of learning into management programs using one of the three approaches identified in the literature for teaching critical thinking. These approaches are the general approach, infusion approach, and immersion approach. The current research study focused on a management class that used the immersion approach for teaching the critical thinking process.

RESEARCH METHODOLOGY

This research inquiry attempted to analyze the culture of one management classroom at one university in the fall of 1995. The research objective was to find out how hospitality management students demonstrated the process of critical thinking in decision making. In this section, the reasons for choosing a qualitative methodology to conduct this research are explained. The research design of the study includes research questions. the setting and informants of the study, the techniques employed to collect data. the ethical considerations to protect the interests of the informants involved. and the techniques to analyze the data. Finally, the rigor of this research is explained.

Selection of Qualitative Paradigm

Research in education often has been conducted through the use of a quantitative, positivist paradigm; however, that does not necessarily mean that this methodology should be adopted when a researcher is searching for meaning in a classroom setting. This researcher believed that an investigation of the underlying assumptions of students when making decisions did not lend itself to traditional quantitative research methods. Therefore, a qualitative inquiry was used in this study of critical thinking by hospitality management students.

A variety of terms identify the various forms of qualitative methods, including ethnographic, phenomenological, constructivist. and a host of others. "Some terms describe the perspectives qualitative researchers adopt (for instance, naturalistic, interpretive, experiential, clinical), or the tradition in the field on which they base their stance (such as ethnography, phenomenology, symbolic interactionism. or ethnomethodology)" (Tesch, 1990, p. 58). Erickson (1986) used "the term interpretive to refer to the whole family of approaches to participant observational research" (p.119). Guba (1978) referred to qualitative research as "naturalistic inquiry" because it was a "discovery-oriented" approach that minimized investigator manipulation of the study setting and placed no predetermined constraints on the research outcomes.

According to Merriam (1988), qualitative research is descriptive and "concerned primarily with the process rather than outcomes or products" (p. 19). It is inductive in that researchers built abstractions, concepts, theory, and hypotheses from details observed. The researcher is the primary research instrument for data collection and analysis. Qualitative research is primarily "interested in meaning - how people make sense of their lives, experiences, and their structures of the world" (p.19).

Patton (1990) proposed the 10 themes of qualitative research as: naturalistic inquiry, inductive analysis, holistic perspective, qualitative data, personal contact and insight, dynamic systems, unique case orientation, context sensitivity, empathic neutrality, and design flexibility. Qualitative inquiry offers opportunities for conducting exploratory and descriptive research "that assumes the value of context and setting, and that searches for a deeper understanding of the participants'... experiences" (Marshall & Rossman, 1995, p. 39).

The purpose of the current research inquiry was to explore the natural setting of the classroom to uncover the insight and understanding conveyed by students in this classroom. Thus, the focus of this research inquiry was on the critical thinking process in decision making rather than on the outcomes or results obtained from that thinking. Patton (1990) recommended qualitative inquiry as an appropriate method when "studying process because depicting process requires detailed description, the experience of process typically varies for different people, process is fluid and dynamic, and participants' perceptions are a key process consideration" (p. 95). Chacko and Nebel (1990) also believed that for "certain kinds of hospitality research, especially where leadership, managerial and behavioral issues are involved, qualitative research methods may be the more appropriate research methodology to follow" (p. 383). For these reasons, qualitative inquiry was chosen for this study. It enabled the researcher to uncover the perceptions, feelings, behaviors, and background knowledge of people involved and to observe the complexities of the critical thinking process in decision making within the context of a specific classroom setting.

Research Design

Glesne and Peshkin (1992) state that qualitative inquiry includes interpretation from informants' comments or observations, an understanding of their perspectives, a search for

patterns or themes of behavior, and the context of situations. In naturalistic research settings, the researcher is the research instrument as he/she observes, asks questions, and interacts with research informants. Thus, qualitative inquiry demands that a researcher be open and honest about his or her biases, assumptions, and theoretical orientation. Recognizing that the researcher could not separate herself completely from the inquiry, this researcher prepared a narrative of her background, experiences, assumptions, and biases. This narrative is presented in Appendix A.

Research Questions

Research questions might be theoretical, focused, or site-specific. "Theoretical ones, ... can be researched in any number of different sites or with different samples. Or they may be focused on a particular population or class of individuals; these too can be studied in various places. Finally, the questions may be site-specific because of the uniqueness of a specific program or organization" (Marshall & Rossman, 1995, p. 27). The research design for this study began with the grand tour question: "How do university-level hospitality students demonstrate the process of critical thinking when making decisions related to management case studies in the classroom?" The research focused on a particular classroom of individuals and was site-specific. For purposes of this study, the critical thinking process consisted of three components: information/knowledge (subject-matter knowledge and background knowledge/information on the investigated topic); critical spirit (dispositions, attitudes, habits of mind, and character traits); and reason assessment (abilities and skills to assess reasons, claims, and arguments) (Siegel, 1988). Two mini-tour questions from the literature review were as follows:

1. How do hospitality management students demonstrate the process of critical thinking when making decisions about management case studies?

2. What aspects of the classroom environment/culture help or hinder the process of critical thinking by hospitality management students?

Setting

The naturalistic setting was a university-level management classroom. The course was for pre-professional, upper-level students, usually seniors and graduate students, who were preparing to work in the lodging, foodservice, or tourism industry. The course focused

on discussion and analysis of case studies. The instructor described case studies as "a slice of life.... They are based on real instances.... It is a written record of a decision encountered in making some decisions looking at and solving some problems.... A case includes facts. opinions, surrounding issues, and prejudices of the decision makers" (Tape #2, p.1). A video of the case study method of discussion was shown to the class. The students were asked to use relevant information available to them. The course emphasized the use of management subject matter, but the critical thinking process was not explicitly introduced. However. the class format of discussion/dialogue provided a setting for studying how students demonstrate the critical thinking process in making decisions.

The instructor facilitated the discussions of 16 case studies. The importance of participation was made clear by the instructor in the first class period. "If you come to class and you don't say anything the whole class period. you will get a zero. [If you] come to class and ... say [only] yes or no, that does not give you any points either. When do you get the points? That's when you start to talk about what I [would] do and why [would] I do it. this is what I think needs to be done, these are some of the concerns when I hire so and so, or discipline so and so, and [justification of] why would that be the concern" (Tape #1. p. 10). The instructor made sure students could get participation points from speaking only one time and giving a response that was relevant and well thought out. "... [however,] there is some correlation that the more you speak. the more chances there are of good answers" (Tape#1. p. 11). Therefore. from the first class period, the importance of participation was emphasized. and students were scored more on quality than on quantity of their responses. The instructor collected information concerning this participation by the student as it was happening. Students were asked to read the case studies in advance and to prepare to justify their decisions as to what they think should happen in the case studies.

The course packet contained case studies for class discussions and articles related to hospitality management. The 16 case studies related to topics such as: employee recruitment; employee selection; conflict management; leadership styles; performance analysis; and evaluation and promotion within hotel. restaurant. and foodservice organizations. Issues included participatory management, total quality management, and ethics in the industry. There were assigned readings for the course from the course packet and a textbook.

Students were required to select three articles related to current management-related events from local, state, or national newspapers or trade or research journals and write a reaction paper on each. In addition to summarizing the articles, students had to answer these questions:

- Describe why the issue is important to ... management in the hospitality industry?

- Do you agree or disagree with the way the ... management situation was handled? Why or why not?

- If the article doesn't contain handling of the situation, as manager, how would you deal with the situation?

Students also wrote two additional reaction papers, one after watching a film related to motivation and the second one related to ethics. There were announced and unannounced quizzes during the first part of some class sessions to enable the instructor to monitor whether the students were completing the reading assignments. Short case studies related to performance appraisal and empowerment were given as written assignments for extra credit. After watching a video on conflict management, students developed a guidebook for entry-level managers on how to apply the principles of conflict management. In addition to written assignments, there were midterm and final written essay exams.

In addition to the above assignments, the 13 students in the class were divided into four groups of their choice for group case presentations. There were two group case presentations per class period. Each group had to write a case study and develop questions to facilitate the class discussion for 30 to 35 minutes. Each group had to create questions specific to the particular case study. They could use as a guide the general example questions given in the course packet.

Of 30 class sessions, 26 were audio-recorded using a video camcorder. Of the four class sessions not recorded, two were exam periods and two class periods involved assigned activities outside of the regular classroom. Of the 26 recorded class sessions, the substitute instructor facilitated one class discussion (Tape #18) and in another, a graduate student facilitated class discussion (Tape #21) for her individual case study to complete a course

requirement. The final class period (Tape #26) was used to review for the final exam and to evaluate the course.

Informants

The research sample consisted of all 13 hospitality management students who were enrolled in the management course during fall 1995. All were upper-level undergraduate hospitality students. Of the 13 students, 7 were female and 6 were male. The small size of the sample concerned the researcher. However, Patton (1990) stated that "qualitative sampling designs specify minimum samples based on expected reasonable coverage of the phenomenon given the purpose of the study and stakeholder interests" (p. 186).

The whole classroom as a naturalistic setting allowed for in-depth observation of each informant. This eliminated the need to focus attention on a small number of "key informants" for observation, individual interviews, and content analysis of written documents. The nature of the case studies discussion automatically focused on the most verbal participants. This researcher believed that every student had insights to contribute to the research inquiry. If the focus had been restricted only to the most verbal students, the researcher might have missed the perceptions and experiences of students who were most articulate on written assignments and exams, not classroom discussion. Therefore, including the contributions (oral and written) of all the students in the research study rather than a sample of students eliminated this possibility and provided the researcher with the broadest range of information possible for the inquiry.

Data Collection

Data collected for this research included field notes of two class observers, audio recordings of class periods, interviews with students and instructor, a demographic questionnaire, and the written work of students. These data were collected by the researcher and an undergraduate research assistant. The role of the assistant was to observe the classroom interactions and write field notes, transcribe several audio tapes of the classroom dialogues, and confer with the researcher.

The two observers attended every class session. It was hoped that by being in the classroom during all class sessions, the students would value and trust these observers enough to act as they typically would. They would share intimate thoughts and later answer

the questions asked by the researcher in individual interviews. Information related to the classroom interactions was collected in two sets of field notes (journals) written by each observer. One set of field notes, a description of actual happenings of what was seen and heard, was completed during the class period. and focused on non-verbal data not recorded by the video camcorder. Firsthand accounts of patterns of behavior, as well as culture and context of the classroom, were noted. The other set of journals consisted of reflections and possible reasons for certain happenings in the classroom. These reflections were made after the class period. Personal feelings of the observers and any insights they had about student interactions in the classroom were noted. Information from both sets of field notes (journals) was compared.

Taking field notes had limitations. First. it was only possible to focus the observation on one person while he/she was engaged in the class discussion, or on a small group of students while they were in group discussion at a particular time. Meanwhile. the important thoughts and ideas expressed by the rest of the class could be missed. Secondly. the researcher's observations would provide an "outsider's" perspective, but it would not provide understanding from the informants' points of view. To solve these problems, two other techniques of data collection were adopted. Twenty-six class sessions were recorded using the audio capabilities of the VHS camcorder. Seventy-five minutes class sessions were recorded using 90-minute tapes so that tape would not have to be changed during the class time. The classroom was arranged to best suit the research inquiry without interfering with the normal class setting. The tapes furnished verbatim accounts of what people said in classroom discussions. Video tapes were then transcribed as audio tapes and labeled with serial number of the tape, date. and time of the class sessions. Of the 26 tapes. only 22 could be transcribed because four (Tape #14, #15, #16, #17) did not record properly due to technical difficulties.

All audio tapes were transcribed by the researcher and the research assistant. Those done by the assistant were verified by the researcher. The tapes transcribed by the researcher were verified only as questions arose in the analysis of the data. To compensate for the data lost from Tapes #14-17 due to technical difficulties. data were obtained from the field notes

of the observers and interviews with students. However, students' interactions during those four class periods could not be recovered.

Qualitative interviewing enabled the researcher to gain insights into the research informants' perspectives and served to validate the researcher's observations of the classroom climate. The researcher was able to probe the informants' statements in class discussions to clarify the reasons behind the statements. To ensure some uniformity for the individual interviews, a format of combined semi-structured and open-ended questions was used (Appendix B). The same questions were asked of all informants but specific follow-up questions to elaborate or expand on ideas that had been expressed by the informants also were included. The interview questions were framed so that informant could respond to the research concerns about the critical thinking process in decision making and effects of the classroom culture. The interviews allowed for explanation of new directions and unexpected topics introduced by the students. As the interviews were completed, the researcher reviewed the answers in order to guide the development of the questions for the next interview session. However, the researcher was required to adapt the sequence of the interview questions to what specific informants said and to adhere to the purpose of the interview session. Each student was interviewed three times during the semester for approximately 25 to 45 minutes per session. All interviews were audio-taped.

The researcher had an initial interview with one of the informants to test his/her reaction to the questions. This guided the researcher in rephrasing the questions for clarity before the individual interview sessions with all the students were conducted. In the first interview, all students (including the informant in the initial interview) were asked questions about a written case study (Case 4, Tape #7), discussed in the classroom. This was to probe further the critical thinking of students. In the second interview, questions were asked about another written case study (Case 9, Tape #12) discussed in the classroom and about the two video tape case studies. (Case 10, Tape #15 and Case 11. Tape #16) shown in the classroom. All three cases used in the second interview presented ethical issues. In the third interview, students were asked probing questions about their perceptions of their group case presentations. Questions concerning classroom environment/culture were blended into all three interviews.

There were three separate audio-taped interview sessions for 11 of the students. Scheduling problems made it necessary for interviews two and three to be combined for two students. The researcher also had two separate interview sessions with the instructor. The 39 audio tapes; labeled with informant's code name, date, and time of the interview; were transcribed for use in data analysis.

A demographic questionnaire was completed by each student in the first class session (Appendix C). The researcher also had access to all written work completed by the students for the course. Essay exams, quizzes, reaction papers, conflict management guides, and extra credit assignments were available as additional evidence of students' critical thinking.

Ethical Considerations

Formal steps taken to address ethical considerations involved in the research with human informants included obtaining permission from the University Human Subjects Review Committee to conduct research on human subjects and permission of the instructor and students to use the classroom for the research inquiry (Appendix D).

Permission to have the class be the naturalistic setting for this research inquiry was granted by the instructor of the class. During the first class session, the researcher explained the purpose of the research and the data collection methods to be used, in order for the students to become comfortable with the idea that their classroom would be the setting for a research inquiry. The students were asked to give their consent for the research and a form was signed by each of them (Appendix E). The purpose and procedures of the research were enumerated on the consent form. The consent form explained the nature of participation that the students were agreeing to, that participation was voluntary, and that participants could withdraw at any time. Confidentiality and anonymity were explained thoroughly in the first class session, on the consent form, and in the first interview. Students were given points for completing the demographic questionnaire and a pizza party at the end of the semester as incentives to participate in the study.

Individual interviews with the students were conducted in either a small meeting room or an empty classroom after the class sessions. Interviews with the instructor were conducted in the instructor's office. At the beginning of the individual interviews, permission to audio record the interview was obtained from each informant.

All information collected for this study was kept anonymous by assigning a code name to each informant. Only the researchers had access to the codes. Specific or unique situational details were omitted in reporting the research findings if they could lead to identification of the informant. The instructor had access to the taped and transcribed information, and the researcher had access to students' written work only after final grades were issued.

Data Analysis

Analysis of data was an ongoing emergent process. For example. some data were collected. and a preliminary analysis of these transcribed data was made. Then. more data were collected through observations and follow-up interviews. Analysis of the additional transcripts followed. The analysis continued after all data had been collected. Constant comparative method was adopted for data analysis.

Interpretation of data began with identification. categorization. and search for patterns and themes from transcripts of classroom interactions and interviews as well as written documents. First. the researcher selected phrases or pieces of data from the transcripts and written documents that captured basic ideas from the materials. There was no attempt to filter ideas or thoughts at this point. Then through comparing, sifting, integrating, and synthesizing of the data. themes began to develop. This process continued until no new themes emerged. The themes were then refined further to identify broader themes related to the process of critical thinking. Although the study elicited a large amount of data. only these distinctive broad themes are presented in the findings. A theoretical perspective was used to organize the data. Validation of this analysis was done throughout by engaging a colleague and the major professors.

Rigor of the Inquiry

Qualitative research develops its trustworthiness by providing truth value through credibility. applicability through transferability. consistency through dependability. and neutrality through confirmability (Lincoln & Guba. 1985). Therefore. concepts analogous to reliability and validity were addressed in this inquiry using the concepts of credibility. transferability, dependability. and confirmability.

Credibility

      Credibility was achieved through prolonged engagement at the site, persistent observation, peer debriefing, triangulation, referential adequacy, and member checks. The researcher and a research assistant observed the students' prolonged engagement in classroom discussions by attending all class sessions throughout the semester. This gave the students and instructor time to adjust to the presence of the researcher and the research assistant.

      Persistent observation was accomplished by audio recording the classroom discussions using a VHS camcorder and keeping journals of actual happenings and reflections on the classroom happenings. Peer debriefing with a colleague and the major professors regularly exposed the researcher to questions and critiques, thereby refining the understanding of the findings and interpretations. The researcher's biases were probed and the basis for interpretations was clarified.

      For triangulation, data were collected from sources such as demographic questionnaire, transcripts of students' interactions in the classroom, individual transcripts of interviews with students and the instructor, and field notes from two classroom observers. The researcher also had access to written work completed by the students for the class. By using a combination of observations, interviews, and documentary analysis, the researcher was able to validate and cross check findings. This multi-methods approach increased both validity and reliability of the evaluation data (Patton, 1983). Data analyses and interpretations were done separately by the researcher and a colleague. These data analyses and interpretations were then compared to confirm the findings. Referential adequacy was tested by the colleague on all recorded materials except transcripts of classroom interaction against original audio recording on video tapes. The researcher verified the tapes only as questions arose in the analysis of the data.

      Member checks were conducted by continuous testing of understandings and interpretations with the students during the interviews throughout the semester. Research informants were given the opportunity to clarify, confirm, or refute the researcher's interpretations and assumptions derived from classroom interactions. For example, a student's viewpoint that had been stated in the classroom was shared with the students during interviews to motivate them to clarify and express their own perspectives.

Transferability

Transferability was achieved through selection of all students in the classroom to maximize the range of information uncovered. In addition to collection of thick descriptive data from observations, individual interviews, and written documents, a demographic questionnaire was developed and used in the first class period. The questionnaire asked the student's age, gender, involvement in extra curricular activities, work and other related experiences. Thick description of research inquiry procedures and context for this inquiry were developed in order to compare with other possible contexts.

Dependability

Dependability was achieved through overlapping methods and a stepwise replication. Different data collection methods and different data sources compensated for the weakness of one method with the strength of another. Interpretation of the results of these different methods were compared to strengthen the stability of the research. The detailed description of the process of data collection, analysis, and interpretation were viewed by both major professors. Not only the process but also the products of data collection, findings, interpretations, and recommendations were reviewed by both major professors. Therefore, the dissertation was closely supervised by the major professors, and the researcher's interpretations and conclusions were critically questioned and appraised by them. As a stepwise replication, the researcher and a colleague examined and interpreted the data separately, which in turn increased the dependability of the inquiry.

Confirmability

Confirmability also was achieved through triangulation. Besides triangulation, determination of data existence and data support of interpretations was made by the major professors. In addition, the dissertation was presented in a way that readers also could determine data existence and data support of interpretations. Reflexivity was practiced by revealing the researcher's interest, background, and bias regarding this inquiry. Thus, reflexivity helped the researcher to represent accurately the findings and produce descriptions and interpretations that were relevant to those findings.

FINDINGS AND DISCUSSION

The research setting for this qualitative study was one management classroom. The research informants were hospitality management students. The course involved discussion/dialogue about management case studies. The critical thinking process was not explicitly taught in the course, but many elements of the process were used by the students.

Data were collected in the fall of 1995 to answer two research questions:

1. How do hospitality management students demonstrate the process of critical thinking when making decisions about management case studies?

2. What aspects of the classroom environment/culture help or hinder the critical thinking process by hospitality management students?

Data were collected from five sources: a demographic questionnaire, transcripts of students' interactions in the classroom, individual transcripts of interviews with students and the instructor, written work of the students (examinations, quizzes, and written assignments), and fieldnotes of two class observers (the researcher and the research assistant). The analysis process involved the constant comparison of the data.

While reading the data, the researcher selected phrases from the data to create one-line summaries from students' verbal statements and writings that captured basic ideas/meanings from the materials. Then through comparing, sifting, integrating, and synthesizing, recurring patterns or themes were developed. In most instances, each phrase or piece of data conveyed more than one basic idea/meaning. In those cases, that phrase or piece of data was placed under more than one theme. The data were reviewed several times until the themes became "saturated," and no new themes emerged. Broad themes were then developed from these data. Finally, a theoretical perspective, in this case a three-part definition of critical thinking (information/knowledge, critical spirit, and reason assessment), was adopted to organize, interpret, and present the data.

This section presents the research findings generated from the five primary sources identified above. It begins with a description of the research informants. Demonstration of the critical thinking process by hospitality students is presented. Lastly, findings related to the classroom culture are described.

Demographic Information

All participants in the case study class agreed to participate in the research and remained in the study. Research informants voiced no anxiety about the presence of a mini-cassette recorder during the interview sessions. At the end of the third interview session, all students indicated the audio taping of the classroom case discussions using a video camcorder and the presence of the researcher and research assistant in their classroom had neither affected them nor their participation in the classroom. However, some informants said that they felt the presence of the video camera for a few days, but after that they were unaware of it.

The informants were undergraduate, upper-level university students majoring in hotel, restaurant, and institution management. During the data collection period, no graduate students or international students were enrolled in the course. Of the 13 students who were in the course, 7 were female and 6 were male. All 13 participants in the class were in the age group of 21 to 24 years, except two male students who were over 25. All were single. At the time of the inquiry, nine students were employed. The years of work experience, including part-time as well as full-time employment in the hospitality field, ranged from 9 months to 11 years.

For all students, except one, this class was the first time they had encountered active participation in discussions/dialogue as part of classroom sessions. One student had attended a class where students had to analyze and develop marketing techniques for a company and write a case report on it. Otherwise, none of the students had attended any class where case studies were discussed in class (Tape #1, p. 1).

Students were asked to describe themselves using no more than five adjectives. They described themselves as extroverts using adjectives such as good talkers, friendly, funny, outgoing, easygoing, optimistic, confident, and assertive. However, some confessed they were quick-tempered and aggressive. They thought they were empathetic using adjectives such as patient, sympathetic, understanding, compassionate, comforting, supportive, kind, and sincere. Adjectives such as intelligent and logical characterized their views of themselves as having a high level of cognitive ability. Seeing themselves having a good

work ethic was portrayed with adjectives such as honest, courteous, detailed, organized, quick learning, hard working, decisive, and dependable.

Students also were asked to describe the characteristics of the best boss for whom they had worked. They described this boss as having an excellent work ethic by words such as organizer, motivator, team leader, very hands on, strong willed, clear and effective communicator, and hard worker. They also described their best bosses as empathetic using adjectives such as patient; friendly; fair in dealing with complaints; welcoming employees' thoughts, opinions, and suggestions; helpful in decision making; taking time to listen to problems; and suggesting alternatives to solve problems. Their bosses' confidence and high expectations of employees were summed up by phrases such as allowed employees to experiment in creating a fun and exciting work environment, trusted employees' abilities, and allowed the job to be a learning experience.

Students were asked to describe how they make decisions. Finding an immediate solution and using instinct or their best-educated gut feeling in making decisions was seen in some students' responses. Although they often felt the pressure of time when making decisions, they also revealed a willingness to spend more time thinking about long-term consequences, especially in "life and death" situations, if they were not under pressure. One student acknowledged her need to think things through carefully.

Others liked to evaluate the problem/question, think through the outcomes, and consider possible consequences and benefits of these outcomes. One student stated that she always considered how her decisions would affect her in the long run. Some would take advice from others. Some would develop alternatives, and choose the best alternative/option. Some professed to use logical reasoning in describing how they make decisions.

Hospitality Students' Approach to Case Discussions

In discussing case studies in the classroom, students usually waited for the instructor's lead in starting the discussions. At first, most students answered a question with a single word or short phrase. They justified their answers only if the instructor asked them to do so. Students would identify the problem statements for the case study without giving a reason or evidence. For example, a student would suggest that incompetent people needed to

be fired but did not provide information on who the incompetent people were or why he/she thought they were incompetent. The instructor had to ask the question "Why?" When a scenario under discussion related directly to their own personal. work. or classroom experiences, the students would draw from these experiences to justify their responses.

In individual interviews, students reported they would read a case study at least one time before class to get the information needed to discuss it in the class. The academically committed students would read the case study two to three times. highlight information on protagonists and conflicts/problems, then think about solving the problem in some detail.

- I read it ... and think ...what are the problems,... highlight everything I think that's major and ... review these questions [at the end] to see how I evaluate the problem. (J. Interview #1, p. 2)

- [I] read through the whole case ... highlight who ... I feel are protagonists and ... concentrate on their backgrounds. ...decide whether they are responsible enough for their positions. ...where the main conflict is and ...who are the two protagonists [who are]... involved in the largest conflict. .... Usually I come up with the decision right away. and what I feel should have been decided, ...and how they should deal with their subordinates after that. (G, Interview #1, p. 4)

However. some students just read the case to get a general idea of how to solve it. Then. they went to the class to listen to what others said. or to offer their opinions to see how others would react. and to discuss the case further. One student acknowledged he read the case more seriously if it was for the exam.

- I basically just go by what other people say. And listen ...and I'll see if I agree or ... don't agree.... Sometimes I say things ...just to be the devil's advocate. ... if I agree with them and [I] may ... get more input....[I] basically read the cases the night before, just look at it....When we are in the test ... I thought about [it] a lot more. ...[But if the case is to be discussed in class], I wait till I get to the class basically and discuss in the class. (D. Interview #1. p. 4,5)

- [I] try to figure out [how] to solve the problem ....come to class with rough ideas in my head .... Then [the instructor] started to talk about more in-depth parts of the case ...I throw my idea [out]... other people get in on it ... somebody else might have

deeper thoughts and I say 'wow!' I might change [my opinion] and go with them and [be] totally on their side. Some of these cases can go either way. It depends on the way you really look in-depth at it. (C, Interview #1, p. 4,5)

For this research, critical thinking was defined as reasonable reflection about what to believe or do (Ennis, 1985a, 1987, 1991). It involved information/knowledge (formal subject-matter knowledge and background knowledge or other relevant information), critical spirit (dispositions, attitudes, habits of mind, and character traits), and reason assessment (abilities and skills to assess reasons, claims, and arguments) (Siegel, 1988).

Although specific critical thinking skills as such were not taught in the class, the students were asked for a definition of critical thinking in the third interview. They mentioned terms found in the literature: problem solving (Ennis, 1987), reasoning (Siegel, 1988), and analyzing (Dick, 1991; Facione, 1990a; Facione & Facione, 1992). By mentioning spur-of-the-moment thinking and instinct thinking, they brought up intuition as complementary to critical thinking (Walters, 1990). Students often used the word thinking in their definition - specific thinking, detail thinking, in-depth thinking, important thinking, instinct thinking, spur-of-the-moment thinking. According to them, the activities of problem solving, reasoning, and analyzing involve the skills of listening, asking questions, explaining in depth, expanding on questions, and getting ideas from everyone through discussion. The critical thinking process for these students seemed to involve these steps: looking for answers, weighing the solutions, considering implications and consequences, and arriving at a best solution. For some of these students, formulating opinions was an element of critical thinking.

The following excerpts are examples of specific responses to the question, "What is critical thinking?"

- Critical thinking would be like problem solving, more work. You're either looking for answers or ... trying to solve a problem. It's more detail, not just random thinking about what I'm going to wear today kind of thing. You have a focus, and it's serious! (K, Interview #3, p.3)

- The way we arrive at information like in the class .... thinking process, reasoning in the way we do it. (H, Interview #3, p. 3)

- Decision making. Spur of the moment thinking... In-depth thinking ....why did this person do that for what reasons? Who, what, when, where, why ...to understand the bases for the decision. (F, Interview #2&3, p. 5,6)

- Challenges you to respond intelligently and in-depth. ...Somebody does not understand so that forces you to expand on it. ... The response or question you have through critical thinking encourages other people to ask questions or maybe if you don't explain it well enough [others will ask] you to go into further depth. (B, Interview #3, p. 3)

- Analyzing ... situations or topics ...and think[ing] about it in terms of what do I see and what do I think it means. Listening to others telling me what they saw or thought of that and discussing it. (M, Interview #3, p. 2)

Students viewed themselves as demonstrating critical thinking when the instructor asked them questions, and they had to draw their own conclusions and provide justification. They said they usually used information given in the case situation and sometimes information and theory from their education. Their answers had a personal touch; they said they would like the case to be decided as if they were in the situation, which was the instructor's intent. They relied on the instructor to ask questions; they did not initiate the first questions.

- [The instructor] asks the questions... you have to relate back to the case....to draw answers ... why something was done or should something be done different[ly] ... to think of what my bases for the answer are gonna be .... I use critical thinking skills to come up with decisions or ... answers. (F, Interview #2&3, p. 6)

- [I] listen to what the instructor presents us [and] use all the situations that I'd been in, the way I'd been treated and how I wish I ... [had] been treated or the way the decision ... had been made. (L, Interview #3, p. 2)

Some students thought they were demonstrating critical thinking when they decided whether to agree or disagree with the solution another student suggested. Others thought they did their best critical thinking when writing an exam or preparing for a group case presentation.

- When somebody has something to say, I think about it and make a decision in my mind if I agree with it ... and if I disagree, why. [The] kind of questions [the] instructor [asks] gets you thinking. (E, Interview #3, p. 4).

- When you write something down then you have to think harder. ...to say what you really mean.... The exams cause people to do critical thinking more than the class discussion. (B, Interview #3, p.3)

- I think we did a lot of critical thinking [for our group case], because we did have a hard time writing the case. (I, Interview #3, p. 3).

These comments showed students believed they were demonstrating critical thinking when they used other points of view to compare with their own, when they made a judgment, or when they put forth effort using their mental abilities. However, one student indicated that he demonstrated critical thinking even when he made an important decision in a short period of time. Several students' definitions focused on problem solving in a short amount of time.

- You are thinking of how to solve these problems and wrap them up in a short amount of time.... [From] the time you [encounter] the case until the time you start talking about the problems and how to solve them, that is [the] critical thinking period. (C, Interview #2&3, p. 6).

Their responses showed that students accepted the importance of thinking and acknowledged the need for critical thought. However, students identified critical thinking with consuming time as well as demanding mental effort and accountability. They focused on problem solving in real life in a short period of time. Nevertheless, they confessed they would exercise in-depth thinking if they were not under pressure and if the decision was for a long-term or a "life and death" situation. According to the students, many hospitality problems needed to be solved on the spot. But students also believed critical thought needed time. The literature neither explicitly nor implicitly deals with time as a factor in the critical thought process. In individual interviews, students did not mention critical spirit being an important component. Neither did they refer to the importance of general industry and specific organizational knowledge and facts from labor laws, interview protocol, organizational handbooks related to the problem.

Critical Thinking Demonstrated by Hospitality Students

The first research question in this inquiry was: "How do hospitality students demonstrate the process of critical thinking when making decisions about management case studies?" Analysis of transcripts of students' interactions in the classroom (T), written documents (W), and transcripts of individual interviews (I) revealed 14 broad themes that describe the critical thinking process demonstrated by hospitality students when they made decisions for the case studies. These 14 broad themes were numbered and organized according to three components of the critical thinking process (information/knowledge, critical spirit, and reason assessment). To facilitate discussion of the themes, similar themes were grouped and labeled. For example, four broad themes (case study evidence, evidence of subject matter knowledge, work experience evidence. and personal experience) were grouped and labeled as sources of evidence. This organization of the 14 broad themes is shown in Table 1.

In keeping with the nature of qualitative research, the presentation and discussion of the data emphasize the thick description of the themes and do not quantify the data. Such words as "some." "a few." "the" in reference to the students in this study mean more than one student. but no specific number can or should be attached. The important point of reference is the theme.

Information/Knowledge

Sources of Evidence

Students used various kinds of evidence in reaching conclusions related to the problems presented in the case studies. By far the largest amount of evidence to justify their decisions came from the case study information. Other sources of evidence used by these students were subject-matter knowledge, work experience, and personal experience.

Case study.

First, the students took into account the total situation described in a case and tried to clarify the problem or situation.

- I did read the case a couple of times [to] just kind of look at different things .... There wasn't [just] one problem. There were many problems, and you have to consider all of them. (I, Interview #1, p. 2)

Table 1

Broad Themes Reflecting the Critical Thinking Process Demonstrated by Students When
Making Decisions for Case Studies

| | Source | | |
Component and Theme	T^a	W^b	I^c
Information/knowledge			
Sources of evidence			
Case study (1)	X	X	X
Subject-matter knowledge (2)	X	X	X
Work experience (3)	X	X	X
Personal experience (4)	X	X	X
Context/time (5)	X	X	X
Critical spirit			
Elements of critical disposition			
Empathy (6)	X	X	X
Open-mindedness (7)	X	X	X
Influences on critical disposition			
Embedded assumptions (8)	X	X	X
Beliefs (9)	X	X	X
Values (10)	X	X	X
Personal ethics (11)	X	X	X
Norms of leadership (12)	X	X	X
Reason assessment			
Challenging justifications (13)	X		
Acknowledging differences (14)	X	X	X

^{a}T = Transcripts of students' interactions in the classroom. ^{b}W = Written documents (essay exams, quizzes, reaction papers, guidebook, extra credit assignments). ^{c}I = Transcripts of individual interviews.

- Even though [hiring the General Manager from another hotel] would take less dollars. ...it says [in the case] it would take him a year or so to be probably as effective as [the director of operations], and it possibly could be a springboard for him to move on somewhere else. He didn't have that much experience ... so [he may] just gain some experience from this job and move along, so it'd be higher turnover. All the way [it will be] less effective, less productive if you hire him. (M. Tape #4. p. 13. 14)

- [Two problems with the interviewing process were: 1. One of the interviewers] doesn't use the same questions for every interview [with prospective recruits]. [2. One of the interviewees] never met the owner of the restaurant chain. herself. (K. Quiz #2)

Then, students used evidence from the case study to draw their conclusions about the situation and to justify their decisions. In one case study discussion. the instructor asked students' opinions on why they thought one of the characters in the case study was a good employee. The students concluded:

- She was well trusted by employees. (A. Tape #19. p. 16)
- She was methodical. (G. Tape #19. p. 16)

Students felt the case studies were well presented and self explanatory. Generally all the students thought they had enough information or materials to participate in the case discussions and to make decisions about the cases. Sometimes they felt too much information was given, and they were confused by this irrelevant information. However. there were times when they felt the information provided in the case studies was not clear or more information was needed.

- [One of the applicants for front office manager position] had so many jobs. He's jumped from different place to different place.... [But] didn't say why he had to leave .... doesn't say he had a better offer somewhere else .... it might be that it was a bigger club. but it doesn't explain. (C, Tape #5. p. 26)

- We thought [the manager from the European hospitality industry] had a lot of ability in the big hotel ... we don't know what kind of situation he was in before. Maybe ... he just didn't get along with [the managers] before. (I, Tape #4, p.17)

- The assistants may not be capable of making management decisions such as changing menus .... [but] we don't seem to have enough information from the case to conclude this. (G, Empowerment Extra Credit)

Although unclear information frustrated them occasionally, some students thought information might be left out intentionally. Lack of all the information desired might happen on the job. Students realized that they had to figure out what did happen or what could happen. They acknowledged that as managers they would not always know the whole story.

- I think they expect you to either infer things from what they wrote or ... to come up with your own solution. Because some of the stuff is [not] relevant .... I tried to make some assumptions if I could. If I should or not, I don't know. But I try to make assumptions and just fill in the gaps and maybe through discussion, we can figure out [things] together. (K, Interview #4, p. 1)

However, students were not afraid to show their own lack of knowledge or information. They recognized their own limitations and asked for additional information and clarification from each other.

- I think [serving low-quality alcohol as high quality alcohol or watering it down] is against the law too, isn't it? (I, Tape #22, p. 5)

- [I asked the question] because I didn't know whether or not a court could make you hire somebody even after you decided not to hire them, and you already filled the position with somebody. I guess I was trying to find out if it is possible for a court to do that. (B, Interview #1, p. 5)

During individual interviews, students acknowledged they would ask their friends, family, colleagues, or superiors for more information or clarification if they did not have adequate information or prior knowledge. But few written sources were mentioned. Trade journals were identified as a source but not current research or management theory that could be accessed from academic journals.

- Based on the knowledge that I already had, and if I don't have the knowledge, I'll get it before I make a decision .... ask someone who does know, go to trade journals to get the information because I don't want to [make a decision] without having knowledge beforehand. I don't like to speak before I think. (M, Interview #1, p.3)

- Ask family or friends or either go up higher [to the management] if I feel like I don't have enough information to make a right decision or quite sure what to do .... I don't want to ask somebody what to do [and] then follow them. I want to be able to make my own decision but first ask for some advice [about] how to handle it ... Just kind of get a lot of different people's ideas, but basically I'll make [the] decision by myself. (L, Interview #1, p. 2, 3)

Students sometimes restated their peers' statements to clarify meaning. At other times, students summarized other students' statements or explained with an example.

- You can always talk about chairs, tables, [and] how run down they were. The chairs were just hard. The floor, the carpet was greasy ... and horrible looking. (C, Tape #21, p. 4)

Restatement: So basic appearance of the restaurant. (G, Tape #21, p. 4)

- Once you get to the top of the club you become like [a] General Manager where you [are] still gonna have a board ... and all the members [will] still always be your boss. (C, Tape #6, p. 15)

Restatement: Decisions can be overridden by someone else. (M, Tape #16, p. 15)

In the discussions/dialogues on the cases, the students tried to separate out the information immediately relevant to making a decision. They practiced true dialogue by restating certain concepts and asking if this is what the speaker meant. Restating their peer's comments permitted the students to become better listeners. They often wished that additional information had been available. Although they might have been using learned knowledge from other management classes, few specific sources were identified clearly. Neither did they often identify additional information that they could obtain from other sources, e.g. interviews with other managers and relevant literature that might apply. Credibility of sources also did not seem to be questioned. Each case seemed to be decided on information available in the printed material provided for the students.

Subject-matter knowledge.

Students believed they were well prepared in subject-matter knowledge. Most students had completed almost all the hospitality courses in their programs of study. Students recalled and applied this previously learned subject-matter knowledge in their

justifications. In one class period, the instructor asked what laws management must comply with to prevent lawsuits or unemployment claims filed by employees terminated without justification. Students answered:

- OSHA, Sexual Harassment, Equal Employment Opportunity, and Americans with Disabilities Act. (L, M, B, E, Tape #2. p. 10)

In other instances, students applied human resource management knowledge about empowerment, job sharing, interview protocol, job descriptions, job specifications, and ethical business practices.

- As we discussed in class, empowering employees is challenging and gives employees hope of promotion. (J, Empowerment Extra Credit).

- Provide a flexible work arrangement like job sharing. Perhaps let the employees work some of the other positions. if qualified to do so. For instance, one of the coat girls wanted to be a hostess. (F, Final Exam)

- Make sure that each applicant is asked the same questions to prevent discrimination. Use job descriptions and job specifications to choose an applicant. (E, Quiz #2).

- It is not good business practice to let money not be accounted for. If you think that you are doing [close personal friends of the doctors] a favor [by not notifying them of their past due accounts], one day all those favors can backfire on you like we saw in the movie [shown in the class]. (L, Ethics Reaction Paper).

In an individual interview, a student indicated a source of additional subject-matter knowledge regarding the interview process for selection of employees.

- Basically, I can get this from [prerequisite course] where we talk about interviewing people .... [One of the interviewers] just establishes a guideline that he's gonna use in interviewing people, and he sticks to his guideline. (E, Interview #1, p. 5)

One person's application of subject-matter knowledge triggered others to suggest different applications. This showed students were willing to take seriously other's evidence and to consider it in determining actions to take. One student introduced the concept of decreasing employee turnover with this statement:

- Convince [the owner], she can decrease the [employee] turnover rate [and] that [this] might make more money. To decrease [the] turnover rate is to make employees happier. (E, Tape #21, p. 10)

The above comment led another student to suggest increasing customer turnover as a way to please customers:

- I think [one of the students in the class] kind of [suggested] if they have more employees serving instead of one server taking 10 tables ... [and] if they were able to turn [tables] a lot faster, maybe clean the tables faster and seat [walk-in customers], they can make more money, people can be a lot happier instead of waiting in the line. (C, Tape #21, p. 11)

When the instructor raised the issue of the cost (consequence) incurred by a shortage of staff in management, a possible decrease in productivity and a loss of business were introduced as evidence.

- Productivity is gonna drop .... if there's no one there to supervise that activity, and employees could be left on their own. (A, Tape #4, p. 4)

Another student commented about the possible decrease in quality:

- I think with what [one of the students in the class] said, quality might drop, and then you'll get customers who are angry, and you'll lose their business. (B, Tape #4, p. 4)

Students acknowledged that as prospective managers they needed to know basic management principles. However, students did not take time to reaffirm what these principles were.

- It's hard to remember a lot of things .... There's always support materials that you can look for ... in the library or in textbooks, but I think a lot of information [we use] comes from [prerequisite course]. If you don't ... have your notes from that class, then in a way you're kind of lost, I guess .... [But] a lot of basic information you really need to know [if] you are the manager. (F, Interview #1, p. 3)

Work experience.

In addition to contrasting and comparing their work experiences with the case study information, students saw their previous work experiences as providing evidence in their

justifications. When the instructor asked what were the key responsibilities of front desk personnel, the concept of communication was introduced.

- You need to be able to communicate with [persons in] the departments like sales, food and beverage. If you've got a big function, you need to be able to coordinate [activities]. (F, Tape #5, p. 14)

In other instances, students applied what they had learned or experienced in the workplace as evidence.

- A bottle has a certain seal. Once the bottle is empty you're supposed to honestly ...discard [it] .... [When the] same bottle is used [again], that's the violation right there [of the liquor license]. (F, Tape #22. p. 14)

- Our managers were working 12 to 16 hours a day, and we were two managers understaffed at the time .... Their stress went right down to all the employees. (D, Tape #4, p. 3, 4).

Many students had background knowledge from working in the hospitality industry. However, one student felt inadequate because some students had more work experience than he did.

- I learned how to deal with people .... what might set them off or how to get more work out of them. Some students in class here, ... [have] a lot more management experience than I have. (E, Interview #1, p. 9)

According to the students, those who had more work experience than others in an area of the hospitality field were able to use evidence from that to argue with more conviction. Although information about the case studies was the same for all students, differences in work experience resulted in some students being more involved in the class discussions.

- Some students talk more because they have more work experience [in certain areas of the industry] and some don't because they don't have enough work experience. (D, Interview #2, p. 5, 8)

- There are a couple of people who dominate the conversation, but they seem to have a lot of experience in the field [so] they have a lot of input into [the discussion] .... I think a lot of people have in their hearts very, very strong opinions .... But I just like

to listen to what everyone says ... I think a lot of other people in the class have things to say, and they do say it at times, but they are just not as assertive. (I, Interview #1, p. 3, 4; Interview #2, p. 5)

In fact, students who were considered to be "experts" in a particular area of the hospitality industry often were asked to help clarify concerns or to assist in contributing information to inquiries/decisions. The following dialogue illustrates this point.

- I've never been a bartender, but are you made aware of that [Dramshop] law when you start? Do you know what it is? (L, Tape #20, p. 20)

- No, not at all. But I went through [training] at the ... [hotel] but there wasn't anything said about Dramshop. They gave us ethical ways to handle situations, but they didn't go over the legal issues. (B, Tape #20, p. 20)

Personal experience.

However, students who had little work experience in the industry could make valuable contributions to the discussion by using their personal experiences in their justifications. One student's comment on whether there are shades of gray in enforcing an employee policy consistently illustrated the need to use common sense.

- If you're going to have a consistent policy, you have to have it ... [for] all employees .... If [an employee says his/her] child has to go to the hospital, then I would assume that you know you can ignore [the tardiness]. But if [one employee has] three blown-out tires, ... or four grandmothers die in the last four days ... that would be kind of obvious [he/she was lying]. (J, Tape #20, p. 7, 8)

When students were discussing rigid service procedures required by some restaurants, one student described a personal experience his parents had.

- My parents went for dinner .... the server would not serve the meal until he/she could remove all the salads. My mother wanted [to eat the] salad with her meal, and the server tried several times to take away the salad .... and for some .... [unknown] reason the lights went out and when the lights came back, her salad was gone. (A, Tape #21, p. 8)

Another student reflected on what she had read in the news about a customer suing a fast food chain restaurant for the damage caused by its product.

- I heard that's not the appropriate temperature, ... because they had been warned before about the temperature of the coffee. (M, Tape #6, p. 10)

Students were asked in the individual interviews how they decided what they would do if they were in the situation described in the case study. In addition to case study information, they indicated they used previously learned subject-matter knowledge, work experiences, and personal experiences.

- Basically [I learned] from class experiences, experiences that I had in previous jobs, [prerequisite course], and other courses that I had where we ran into management problems. Just other classes in the university and things that I learned that you can apply that helps come to a solution. (E, Interview #1, p. 2, 3.)

- I form my opinions by the knowledge gained being at [the university] and listening to my instructors, listening to people around me, what people expect, what people are looking for. (M, Interview #1, p. 2, 3)

- I've been working in the hospitality industry for 10 years ... so I work from personal experiences. (A, Interview #1, p. 3)

- Maybe something that happened to me in my work place or [I was an] eye witness ... in another work place or [it happened to] one of my friends. (J, Interview #1, p. 2, 6)

- So I kind of use everything [prior knowledge, reading materials] and put it together and make a judgment. (F, Interview #1, p. 2)

Data showed that students were able to transfer evidence from subject-matter knowledge as well as their work and life experiences and apply them to situations in the case studies. However, there were times when this evidence was not enough. Some case study data were not detailed enough to provide all the information needed. Some students were not able to recall the detailed subject-matter knowledge needed. Work experiences were not always relevant to the problem in the case studies, and the amount of work experience individual students had varied. According to the students, their ability to critically think and reason through their solutions depended on two things. It depended on relevant information provided in the case study and the relevant knowledge available to them at the time. They did not see themselves seeking additional knowledge on their own before the discussion began.

Students realized that they needed to have evidence for their decisions. They saw the importance of understanding the total situation. Readily available subject-matter knowledge from previous courses as well as work and personal experiences were used. There was no evidence demonstrating the integration of knowledge and experience across cases or introducing additional sources of information.

Context/Time

To these students, critical thinking included generating alternatives and justification in context, often in a limited amount of time. On numerous occasions in class discussions, written documents, and individual interviews, students emphasized the importance of situational factors on their decisions.

- If the property is older compared to a new one, one may be computerized and the older one may not be, so there's going to have to be different things that you have to do. (L, Tape #5, p. 8)

- [Managers] recognize that the nature of conflicts vary from situation to situation, so we set some [general] guidelines to follow if a problem concerning cigarette smoke arises, [for example]. (M, Guidebook)

- If you're working in some place like a resort, everyone just hangs out .... If you're in ... a business workplace, like a phone company, ... it's more like a hierarchy of levels. (G, Tape #2, p. 19)

- It also depends on the regulations of the place. You know sometimes they don't allow managers to go out with regular employees after hours, off the property. (A, Tape #2, p. 19)

The importance of finding an immediate solution in a perceived short period of time was emphasized in many students' responses. The students believed that making a decision quickly would avoid the consequence of developing a more serious problem.

- Once you have identified the conflict, try to get the upset guest away from it as soon as possible. If non-smokers were seated in a smoking section and decide they can't handle it, move them immediately. If you attend to their problems right away, they will remember how the situation was handled and forget about the problems by the end of the meal. (L, Guidebook)

- If [the customer] was there first and now if she wants to be moved, and if you don't help her out then you get to consider the repercussions that she can [create] as she passes the word on to the people when she leaves the restaurant saying bad things, and then you lose business. (B, Tape #10, p. 11)

- I think when you are actually put in ... [a] situation, you have to make snap decisions, so you don't have a lot of time to analyze like we are doing [in the classroom]. But I think everything we learned will come back, and [we] will apply it. (I, Interview #1, p. 3)

However, the students recognized a different aspect of time. The following excerpts confirmed that students knew that time often was needed to evaluate the situation, to organize their thoughts, and to make a long-term decision. Most decisions would have consequences for some time.

- Don't try to rush the evaluation. That is the most important part of the employer and employee relationship. (J, Performance Appraisal Extra Credit)

- Perhaps [the supervisor] can give [newly promoted employee] a little time off to reorganize his thoughts. (F, Motivation Film Reaction Paper)

- If there is [a] conflict between employees, ... [it] might take me a long time to figure [it] out ... I can't just make a snap decision, and say this is gonna be cured .... These people [are] gonna be here every day .... I will make the best decision and [a] snap decision if there is a problem in the establishment [needing it], but for something more long-term, I think [I will take longer]. (K, Interview #1, p. 2; Interview #2, p. 4)

In the individual interviews, many students expressed their concern about the relationship of making decisions in the classroom and in the "real world."

- [When] actually in the situation ... [you will] probably act differently than you would in a regular classroom situation. Hopefully, you'd be able to stand back and say OK this is ... the problem. I need to do this ... in order to rectify that problem. Most of the time probably [you] won't be able to do that cause you are in the heat of the moment. (J, Interview #1, p. 3)

- A lot of things in the real world are things you [are] gonna have to take care of right there at that time. You can talk about it, but who knows what you'll really be doing

till you are in that situation .... Usually a lot of the decisions that I had to make are on-the-spot decisions, and when we were busy and in the middle of rush .... But if we have more time to think, [then we'll] find input from other people, see what they think, and have them do what they can. (D, Interview #1, p. 5)

Students also argued for the use of their "gut instinct" in response to problems requiring immediate decisions. They used their instinct to meet the pressure of time constraints in their decisions. They trusted their own instincts to make the decisions needed. In fact, at least one student believed that good managers were born not made. You could not be taught to be a good manager.

- I'm in a situation, [and] it calls for an immediate decision. Usually I just depend on my gut instinct. [If] you have a little bit of length of time to make a decision. ... I still go with my gut instinct, but ... I would use additional resources or text books or ... secondary information. (F, Interview #1, p. 3)

- I solve them as fast as [I can] so that everybody is happy ... Say if it is [a] small size problem ... I do rely on instinct. Just do it ... Throughout the years, I've just been able to solve problems on my own because ... I think on how [my manager would] go about it, and I know how I go about it, and I will throw it out there and solve it ...You can't be taught to be a manager. You are born to be a manager .... If you are [a] true manager, your instinct should be right, whatever decision you decided to choose. (C, Interview #1, p. 5, 6; Interview #2&3, p. 3, 4)

- We all have in our minds what we think is right or wrong, so I'd probably use that, because someone else might think in a different way .... There is [a] little voice inside everybody .... intuition is very personal and internal. (K, Interview #2, p. 4; Interview #4, p. 1)

Concern for the situation and time confirmed that critical thinking for these students was contextual (Warren, 1988). Critical thinking occurs within conceptual frameworks of the given situations. Students showed confidence in their own abilities to manage the future situations they would face. They felt comfortable relying on their "gut instinct" to make decisions. They did not seem to realize that their personal beliefs, values, and ethics would

be embedded in their "gut instinct." Being willing to examine their different individual "gut instincts" as a group would illustrate the extent of their critical spirit.

The students' decision making process was sensitive to context of the situation (Lipman, 1988a), but they believed many of their managerial decisions would have to be made quickly. They pointed out that many hospitality-related problems especially at the supervisory or middle-management level required a decision on the spot, whereas in the classroom there was enough time to analyze the problem. When they were in the classroom, there was little urgency because the atmosphere was relaxed, and they were among their peers. They did not reflect on the basis of these quick decisions but felt that each person would have to deal with them in his or her own way. The closest literature on critical thinking that deals with these types of decisions is in the discussion of intuition and insight as complementary to the reasoning skills of the critical thinking process (Walters, 1990). But the sources of intuition and insight could be explored in this course as part of the critical thinking process.

Critical Spirit

A critical thinking disposition is the tendency to use one's critical thinking skills (Facione et al.. 1995). Having a disposition to use critical thinking skills is analogous to having a critical spirit (Norris, 1985). According to Norris (1985), "The critical spirit requires one to think critically about all aspects of life [case study], to think critically about one's own thinking [as a manager], and to act on the basis of what one has considered [decision] when using critical thinking skills" (p. 44). Therefore, a critical thinker with a critical spirit has these characteristics - independence of mind, open-mindedness, wholeheartedness, intellectual responsibility, and respect for others [empathy] (Oxman-Michelli, 1992).

Elements of Critical Disposition

Two of these elements of critical disposition, empathy and open-mindedness, were broad themes found in the data.

<u>Empathy.</u>

One element of a critical disposition is respect for others "in terms of sensitivity, empathy, fairmindedness, readiness to listen, and willingness to consider the others' points of view" (Oxman-Michelli, 1992, p. 6). Empathy involves "the ability accurately to perceive and comprehend the thoughts, feelings, and motives of the others to the degree that one can make inferences and predictions consonant with those of the other, while remaining oneself" (Gallo, 1989, p. 101). Showing empathy is an important disposition of being a critical thinker.

Students' empathy was identified by their acknowledgement of the importance of listening and showing compassion and concern.

- I think [the supervisor] really needs to listen and try to understand [newly promoted employee's] ideas. (I, Motivation Film Reaction Paper)

- An attitude that reflects concern and compassion will help decrease turnover and increase morale. (E, Final Exam)

- I wouldn't want to see managers who have been with the company so long lose their retirement, their benefits, or their job. (E, Ethics Reaction Paper)

In suggesting ways to show consideration for an older employee, one student wrote:

- Help delegate some of the workload to make the retiring persons feel less bogged down by their jobs. Not too much work, just enough to make the persons feel that someone empathizes with their position in life and that they are cared about .... also make them feel some respect for putting in good years with the business. (M, Midterm Exam)

In one instance, a student handled a conflict between an employee and a customer by looking at both sides sympathetically.

- If you go ahead and seat [the complaining customer when] he's already upset, you ... upset others because they're [in the restaurant] first.... [You have] to explain the situation [to the complaining customer] and [say] "there are people ahead of you." (B, Tape #10, p. 13)

Students empathized with characters in the case studies by reflecting on their expectations for people in these situations. They also tried to put themselves in the shoes of these characters.

- [Managers need to] relieve stress of employees. By having a separate staff come in for late night shows, you can decrease stress ... [from] working such long hours .... This is stressful, especially for college students who have class the next day. (G. Final Exam)

- I try to put myself in the case ...like if I was the manager, what will I do? Or if I was the employee, what will I do? (L, Interview #1, p. 2)

- I tried to put myself in the position of ... protagonist and be fair, equal, be in their place and decide what I will do.... If there is some disturbance between two employees, I try to get a clear picture of both of their sides and the events that led to the disturbances .... [and] whether or not they know that it was [the] wrong thing to do... You can't treat two employees [differently] who do the same thing. (H. Interview #1, p. 2, 6; Interview #3, p. 3)

Open-mindedness.

Another element of critical disposition is open-mindedness "in the sense of alert curiosity, attentiveness, the spontaneous outreaching for alternative perspectives, intellectual flexibility and the willingness to suspend judgment" (Oxman-Michelli, 1992, p. 6). Open-mindedness is a tendency to be tolerant of divergent views and sensitive to one's own biases (Facione & Facione, 1992; Facione et al., 1995).

Students acknowledged the importance of looking at both sides of an issue. They advocated the need for open-mindedness.

- Any discussion should be handled with an open mind and a calm disposition by the manager. (K, Performance Appraisal Extra Credit)

- [The supervisor] should be open to suggestions from [the newly promoted employee, who] obviously knows how to do the job but needs specification. (J. Motivation Film Reaction Paper)

- As a prospective manager, I should keep an open mind. People like [the managers in the case] who don't care to listen to another viewpoint, or think their way [is] the

right way are the reason ...a lot of people quit their jobs and ...customers don't come back. (E, Midterm Exam)

- I am pretty flexible as to like listening to other people and trying not to be a stubborn person. I like learning from others. (G, Interview #1, p. 8; Interview #3, p.1)

- But if you are open to other people's ideas then you will get respect from people, and people will respect you when you offer your opinion or suggestions. (B, Interview #1, p. 8, 9)

Students not only advocated open mindedness but also practiced it. Students were not afraid to admit their limitations in front of others.

- I've never been a manager. I know that sometimes I get a little bit of a temper, but I can't see myself degrading someone and yelling at [him/her] .... I've yelled at people before, sure, but I think that I will have a sense of professionalism about me, and I will not allow myself to do that [on the job]. (M, Tape #20, p. 5)

They also were not afraid to admit their mistakes. One student complained that there was no resume showing the job experiences, but when others pointed out that there was a resume, the student right away admitted her mistake.

- Yes, he did say [something] about a resume. (M, Tape #7, p. 12)

In summary, being open-minded (Ennis, 1991; Facione & Facione, 1992) allows critical thinkers to be tolerant of divergent views and fair-minded (Siegel, 1992) in their evaluations. Some students in this class appreciated and recognized differing points of view as opportunities and challenges. They put themselves in another's shoes to sympathetically explore another point of view. Being sensitive to and listening to others points of view; taking turns in the discussion; showing compassion, concern and empathy; and being open minded, all are part of the critical spirit necessary for good critical thinking.

Influences on Critical Disposition

Influences on the dispositions of critical thinkers are also important to consider. Five of these influences on critical disposition (embedded assumptions, beliefs, values, personal ethics, and norms of leadership) were broad themes found in the data.

Embedded assumptions.

Considering embedded assumptions is one aspect of critical thinking. An embedded assumption is an assumed position that is held deep down in a person's mind. From this position the individual generates a frame of reference through which he/she perceives, thinks. or judges. This frame of reference is often the taken-for-granted base for a particular decision. Candy (1990) noted that each person has a guide to living that is a repository of what one has learned, what one believes, and how one views oneself. This is based on Kelly's (1955) argument that people's psychological processes are channeled by the ways in which they anticipate events. According to Brookfield (1987). "thinking critically involves our recognizing the assumptions underlying our beliefs and behaviors. It means we can give justifications for our ideas and our actions. Most important, perhaps. it means we try to judge the rationality of these justifications" (p. 13). Critical thinking emphasizes the importance of recognizing one's assumptions (underlying beliefs, biases, values, personal ethics), justifying them. and determining if one's assumptions are still valid.

The following statements illustrated the existence of students' embedded assumptions.

- I think a party like this [on] New Year's Eve should tell you it's going to get a little out of hand ... 95% of any party I've ever been to on New Year's Eve. whether it be a dinner party or a party with people our age, a social party. they like to have a good time no matter how old they are. (F. Tape #20. p. 18)

- We were assuming that [the head bartender] is [serving low quality liquor as high quality. brand-named liquor] just because he is the one in charge of purchasing. We don't know that for [a] fact. It could be another bartender. (G. Tape #22. p. 5)

Beliefs.

A person's beliefs are often embedded in assumptions. Responses like the following illustrate students' reflections on their beliefs.

- You've got to stand up for what you think [is] right. (C. Tape #6. p. 12)

- It's like a judgement call. Choose what you think can achieve the best results ... It is all based on your own personal values and beliefs and that is not gonna be the same for everybody. I value something more than somebody else does. Then I am gonna

pick a different role than somebody else chooses. Opinions are just what I think and what I believe is the best way. You get [values and beliefs] from the way you grow up, the way your life was with your parents and siblings. relationships you have with people. Add things as you go along. (B, Interview #2, p. 4)

Students discussed the influences of their backgrounds and experiences on their thinking. These influenced their perspectives and how they made decisions.

- We find [ourselves] looking at [some things] more as [hospitality management] students ....You think back. You've seen how in these videos [shown in the class] .... a lot of people just go in [the restaurant] and eat. [But you] sit under a ventilation system [and see] dust around the ceiling right above where you are eating. (C, Tape #21, p. 15, 16)

- [The manager] might become biased against upper management if employees have had things to say about [upper management]. This might create conflict between management and him .... [Upper management] may not believe in participatory management and getting feedback from employees. (J. Midterm Exam)

Values.

The data indicate that students' decisions were influenced by their values. e.g. their work ethic. They were proud of their profession and had their own ideas of professionalism related to it.

- If it was me, and I was proud of my job and they took the responsibility away from me, that would make me really upset and really feel like I have done something bad. But then, it kind of depends on how persons see their job. Its just a job or its just bartending. Maybe they don't care. (L, Tape #22. p. 11).

- To be quite honest, if I'm forced to hire somebody who did not deserve a job, I probably would try to find another job, just because I do not feel that I should compromise my moral or ethic[al standards] to do something wrong for somebody else. (F, Interview #2&3, p. 2)

Personal ethics.

A number of case studies contained problems involving ethical factors. The students recognized that personal ethics were important but were not always sure how they should

deal with personal ethics.

- You can have two different [situations] and both of them unethical to do, but one of them may make sense to go ahead and do ... [and the] other one may [be] completely unethical. (F, Interview #2&3, p. 2).

- I never like a cut and dry person [someone who sees things as black or white]. I like to say that ... I am [a] moral[ly] outstanding person. but I think that I look at every situation differently. (G, Interview #2, p. 2).

- The company should recognize that each person may have a moral code that they follow which may differ from others. (M, Ethic Reaction Paper)

- I think everyone has a different degree of what [he/she considers to be] ethical and what is not .... just kind of depends on how you grow up and how much of a conscience you have. (I, Interview #2, p. 3).

Students generally declared they would never do unethical things for their personal gain. However, one student admitted that he might as long as it was nothing big, nobody would find out, and it would not hurt his company and other people.

- If a company gives us a copy machine to use along with the copying supplies and it's for the company and it's not my personal gain. then I think its moral and OK .... But for my personal gain, that's not right. (K. Interview #3. p. 3)

- If I do not do what is right, then it will only hurt my chances of getting a promotion or a job with another company. They can tell what you have done .... I certainly would not offer [a] favor to anybody, and I am not going to accept [favors] from anybody .... A favor is to buy me off .... I would not accept anything for me personally. If it's something for the business, then I do not see it as a favor. [like if] it is a promotional effort [that I can use at my place of business]. (B, Interview #2, p. 2, 3)

- I wouldn't do it if its going to hurt somebody or ... the company, or ... [the] reputation of the company .... But if it was maybe to benefit ... me that nobody finds out, maybe nothing big, its not going to affect anything like the business or people. But, if it is just something smaller and just affects only me, then maybe. (C, Interview #2&3, p. 2)

However, students' responses changed when they perceived their jobs were on the line. The following comments illustrate this.

- [The ethical decision] always comes down to whether it comes between you and your job ....[If this were the] only job I could find or the best job I could ever have ... [it] might persuade me to do what other people tell me to do or maybe not stand by what I think. It just depends on how desperate the situation is. If I know I can get another job, or this is not worth it for me to deal with this, I would give it up ....You don't want a dumb little thing ... [to be] the reason that you leave. (K, Interview #3, p. 3)

- If its something [that could] get me into trouble ... it's there but you don't address it ... it won't bother you. I [would] just leave it like that .... Maybe I can't do anything about it. If [there is] something I could do about it, I'll obviously try. I don't know how hard it is to get a job, [to] quit one job and get another job. I really don't want to do that. (E, Interview #2, p. 7, 8)

- It depends on the chances [of] you being caught! ... [and] how serious it is .... If I know I could get fired for it if someone finds out, I wouldn't do it .... If they weren't going to fire me or arrest [me], then I probably will do it just because I'd say that they told me to do it .... If it was my job on the line, I'm sure maybe I would ... leave and get another job. (C, Interview #2&3, p. 2)

Students also pointed out they would decide differently depending on whether the person pressuring them to do something unethical was their colleague or their superior. As long as the decision was for them to make by themselves, they would make an ethical decision and if it affected others, they would consult upper management. However, if the pressure to do something unethical came from a superior, then they had to consider whether their job was worth compromising their personal ethics or values.

- Still you know about the Dramshop laws, and even though your supervisor told you not to follow [policies on serving alcohol], you have an obligation to do it lawfully.... so even having him write something down doesn't protect you from legal action. (H, Tape #20, p. 20)

- [My decision] depends on if they were a direct supervisor of mine or ... [not]. If this decision is mine and mine only, then I'm not gonna listen to them because [its] none

of their affair, but if it was part of their business, then yes, I would obviously listen to them. (M, Interview #2, p. 3)

- If I'm being pressured by other people on the same level to do something unethical, I have to take that to upper management, to [the] GM or my manager .... [Because] in the future, it can hurt my career or hurt what I want to do. I just don't feel that anybody should compromise their own values or morals on ethical issues for other people ... If [you are in] upper-level management, then you have to sit down and look at your job and decide if its worth compromising your own morals .... I'm [a] very honest person in theory, and I go by my own morals and values and ... if I'm being pressured to do something that is wrong, I have to seriously consider looking for a different job. (F, Interview #2&3, p. 2)

Norms of leadership.

The students also used their concept of good leadership in making their decisions. For these students, their concept of an effective manager was influenced by managers they had seen and known. The following quotations demonstrate that students already had accepted certain characteristics as being required of an effective manager or leader.

- I think ... part of a manager's job is to be flexible, to be there if needed,.... whether [he/she is] manager on duty or not .... If the [number of] people on staff for the weekend was not sufficient enough to cover it, ... you can't just say sorry, my vacation time .... Your supervisors can take away your vacation time, no matter what level you are in the organization. (H, Tape #22, p. 22)

- He is responsible for all operations .... you're the GM of the hotel ... you need to know what's going on and if something is not being taken care of, you need to take care of it. (M, Tape #22, p. 22, 23)

- [A GM] should be seen in public. (C, Tape #22, p. 24)

The above quotes acknowledge the influence of students' embedded assumptions (beliefs, values, personal ethics) and accepted norms of leadership on their decision making. Some students recognized their own embedded assumptions and honestly faced their personal beliefs and values but did little to question these embedded assumptions by comparing them to one's different from their own. They acknowledged that their values were

a part of their upbringing, but did not acknowledge the homogeneity of their classmates and that a more diverse population with different values and beliefs might be experienced in future situations. Their valuing of a work ethic and the accepted characteristics needed to be a general manager were consistent with the characteristics they admired in their best bosses.

Personal ethics influenced these students' decisions. Johnson (2001) acknowledged the fine line between relationship building for the company and inappropriate influence on business decisions. If the company they belong to did not already have restrictive gift policies, the students in this study would handle ethical issues concerning accepting gifts at their own discretions. But dialogue involving ethics is not just subjective discussion where all personal opinions are right. Habermas (1990) argues for the development of universal principles (around such concepts as truth, freedom, and justice) through dialogue. In order for a principle to be valid, "the side effect of its general observance for the satisfaction of each person's particular interests must be acceptable to all" (p. 197). Dialogues on ethical behavior would promote responsible thinking, that is, where every decision would be considered in the light of the effects on all involved. As in other rational arguments, persuasion with sound reasons supported by credible evidence would be used in choosing one decision over another.

<u>Reason Assessment</u>

According to Siegel (1988), "The critical thinker must be able to assess reasons and their ability to warrant beliefs, claims and actions properly. Therefore, the critical thinker must have a good understanding of and the ability to utilize, both subject-specific and subject-neutral (logical) principles governing the assessment of reasons. A critical thinker is a person who can act, assess claims, and make judgments on the basis of reasons, and who understands and conforms to principles governing the evaluation of the force of those reasons" (p. 38).

Critical thinkers recognize that some reasons are better than others. "Reasons are defined as beliefs, evidence, metaphors, analogies, and other statements offered to justify conclusions" (Browne & Keeley, 1994, p. 21-22). Credible sources are used to test the soundness of these reasons. Credible sources include verifiable facts, experts in the subject

matter, and sound documented research. Using more than one of these sources increases the credibility of the reasons used for the decision made. The data showed limited evidence that students assessed reasons given for a decision. However, they challenged others' ideas and acknowledged different ways to justify decisions.

Challenging Justifications

Challenges allowed the students to analyze the justification (reasoning) of others. Challenges helped facilitate dialogical thinking during classroom discussions. According to Paul (1987), dialogical thinking insists that students help each other argue for and against every point of view, decision, or belief and take seriously each point of view. Students challenged each others' statements as well as those of the instructor.

The suggestion that a club's general manager should occasionally make spot checks to see that the club's policy of ordering and purchasing alcohol was followed drew this challenge:

- How do you know [the GM] is not the one though? You don't know for [a] fact that she is not the one that's ordering the stuff and making it illegal. (D, Tape #22, p. 7).

The instructor's question of whether to terminate the manager on duty for not preventing overly-intoxicated guests from leaving the event was challenged this way:

- But who is to say that if [the banquet manager] were there that she could have stopped all those guests from leaving? ...Your presence alone doesn't secure that nothing will happen. It depends on whether or not a banquet manager or assistant manager has to attend all of the functions for the whole time. (H, Tape #20. p. 24)

In another instance, the instructor discussed negative aspects of individual output-based reward systems, such as reaching a plateau and high administrative costs of tracking output rates. A student raised this question:

- What happens when [my partner] can have five extra rooms, but I would do as good job but there are only four more extra [rooms] left? Then its not really fair. (L, Tape #23, p. 13)

Earlier when the instructor stated that people were motivated not only by financial rewards but also by opportunity to learn different things, the scenario of risks involved for the employees was raised:

- What happens when someone gives it their all? [But] all along they wanted to bring someone in from the outside to do this job. (M, Tape #4, p. 9)

Acknowledging Differences

Students used different ways to justify their decisions. They sometimes arrived at the same conclusion but justified it differently. In the following exchange, both students decided not to provide as much alcohol as the customers wanted but used different ways to justify their decision.

- Bartenders should know that if ... you're serving this guy and he already had five drinks...how [drunk] would you be right now? So you just think about your own situation and basically just start cutting him off. (C, Tape #20, p. 17)

- You can't provide as much alcohol [as customers want] because you know people could potentially get out of hand because of last year's experience. I think they should cut back the alcohol. (M, Tape #20, p. 17)

Students also compared and contrasted similarities and differences in case study information to their own experiences. They were trying to find relationships between the case situation and what they had experienced.

- He didn't show a lot of emotion [during the interview] and to me that may be bad in some part of your life, basically among your family [members] ... but when you are interviewing maybe if you don't show emotion maybe that's a good thing. (E, Interview #1, p. 5).

- I worked for two different general managers and one ... let everyone else do everything .... And the other one let everyone else do [their jobs] but, if needed, then he would step in. I think that is the best manager .... [The GM made the mistake] because he probably scheduled these people [for vacation at] the same time [as the event] ... but he should step in! (G, Tape #22, p. 25)

- If you're a restaurant manager you're not going to know how to cook something at the exact temperature, ... but you do have people who do know how to do it .... If you don't know exactly how to [prepare the resume], you find somebody who can, and you're just an overseer to make sure that everything works all together, which is why you need communication skills. (G, Tape #5, p. 16)

- Both expect a lot from their employees. [One manager] won't listen to the suggestions [but the other manager] encourages them. (K, Midterm Exam)

- [I] think to myself, "what if"? and try to come up with answers ... The cases don't give you what happens in real life ... you have to draw your own conclusion ... I compare and contrast ... to figure out which person is the guilty party ... You are looking at all [the] facts and try to come up with the verdict. (K, Interview #3, p. 4)

The following evidence illustrates that students were listening to their peers or instructor during the case discussions. They reflected on what they heard during these classroom experiences and expanded on that by providing examples and justifications or determining possible consequences of the decisions and actions. One student suggested:

- If you fill out the order forms, you usually have to sign them for whoever is ordering and maybe its a kind of evidence you could use. (E, Tape #22, p. 7)

Another student reflected and expanded on this situation with an explicit example:

- If you look at the order form that says [brand name] gin instead of [another brand name] then you know whoever is ordering is the one who is screwing everything up, and he is doing it on purpose. (D, Tape #22, p. 8)

In one class period, the instructor explained that many middle-management positions are being eliminated. A student reflected on the evidence the instructor provided earlier, and added:

- [This means] a lot more managers are taking on more responsibilities ... like what you say, they are taking away middle management and empowering the lower-level people to do [the work]. (G, Tape #2, p. 11)

At another point, a student made the statement and another student projected consequences.

- People who are doing 150% will quit doing that, figuring, "Oh! I could just make my job easier if I just come in, punch in, punch out. I'll get the same raise." (L, Tape #11, p. 8)

- They would either quit or their productivity will start to drop. (A, Tape #11, p. 8). The students' discussions focussed primarily on decisions made, not on the process

of making them. In most instances they did not assess justifications (reasons given), but were willing to end the discussion by saying, "there are no right or wrong answers."

Summary for Research Question One

Research question one was, "How do hospitality students demonstrate the process of critical thinking when making decisions about management case studies?" Qualitative data from one class of 13 students in fall of 1995 are presented as 14 broad themes organized by three components of the critical thinking process (information/knowledge, critical spirit, and reason assessment).

Using evidence such as case study information, subject matter knowledge, work experience, and personal experience to justify a decision, as well as asking for more information or clarification all illustrate use of the critical thinking process by these students. Students practiced some self-reflection on their limitations by not being afraid to ask for additional information or clarification from their classmates. They sometimes arrived at the same decision or conclusion about the case by justifying the decision in different ways. They used the similarities and differences between their work and life experiences in analyzing the case study problem situations. Students listened to their peers or instructor during the case discussions. This allowed them to restate the idea to clarify what they heard or to expand the idea by providing examples and justifications. They also determined possible consequences for their decisions and actions; they practiced what Lipman (1988a) called responsible thinking.

The major part of students' decision making was based on information provided in the case studies with occasional application of work experience and subject-matter knowledge. There was little evidence that students assessed the credibility of sources or used printed information sources. Students rarely quoted additional information from other sources as evidence in their discussions. Rules, regulations, and policies related to the hospitality industry change over time. Therefore, students are challenged to keep current with hospitality industry issues. When asked in the individual interviews how to keep up with the changes, students acknowledged they needed to read newspapers, newsletters from corporate headquarters, magazines, periodicals, trade journals; listen and watch news; talk with

industry people and legislators; and listen to customers, co-workers, and employees. They also suggested keeping up with new laws related to health, safety, and changes in social situations; working as interns; being involved in professional clubs and associations; and attending seminars, information sessions, and continuing education classes. Students knew where to get additional information if needed. However, they did not appear to use these information sources to provide credible evidence in their justification of decisions.

According to the students, "answers are not fixed and correct" in the "real world." The students failed to recognize that the process of arriving at answers, not just the answers themselves, is an important part of critical thinking. They claimed they knew how to handle actual problems in the "real world," but evidence to verify this was not convincing. They seemed to be against the idea that actions should be taken according to theoretical principles in textbooks. They pointed out the importance of sensitivity to the context. The students did not understand that management principles are applied within particular contexts. The application of management principles may lead to different decisions in different situations.

Because the dialogue focused on the decision and not the process of critical thinking, some students did not realize that simulated experiences in the classroom (case study discussion) are not meant to give particular answers for real-life situations. Dialogue is meant to provide experiences in which students can practice their critical thinking skills in making decisions. This practice should help students apply a reservoir of knowledge, insight, and skills, such as communication, later in real life. Hopefully, they will call on these skills as they resolve problems in different contexts on the job.

Although some students felt inadequate to apply their limited work experience in case study discussions, many were able to successfully participate in the discussions by using their personal experiences. As viewed by the students, the amount of work experience a student had seemed to influence the credibility of the student's input. The students seemed to evaluate work experience only in terms of amount, not in terms of quality. They did not evaluate that experience in light of management theory. "Book" knowledge (such as management principles) combined with personal knowledge and skills (such as experience and intuition) are essential to good decision making. The decisions will always be made in context whether inside or outside the classroom. The students admitted formal knowledge

learned in the classroom did help, and they would use what they remembered as a guide to apply to a problem/issue.

Students practiced one of the critical thinking dispositions, empathy, by listening, showing compassion and concern, looking at both sides sympathetically, and putting themselves in the shoes of others. They showed open-mindedness by being open to the divergent views of their classmates and admitting their own limitations and mistakes. Student's decision making was influenced by embedded assumptions (underlying beliefs, values, and personal ethics) as well as accepted norms of leadership. However, there was little evidence of students' questioning differences in their own or others' assumptions.

The students recognized that personal ethics influenced their decisions. However, some were ambivalent about stating their own ethical stance. This was particularly evident when ethical situations were introduced by individuals at different levels of authority in the organization. If someone did identify an ethical stance it was not discussed or questioned further.

Analysis of decisions or points of view was done by challenging the reasoning of others. Students had little difficulty identifying problem statements and generating alternative solutions/decisions/points of view with justifications. Reason assessment is defined as the ability and skill to evaluate reasons, claims, and arguments. The students in this study justified (gave reasons for) their decisions. But the reason assessment component of critical thinking, where claims (justifications) are evaluated, was weak. Reason assessment was found in the occasional challenging of others' justifications of their decisions and in acknowledging differences in their justifications. However, evaluating the merits of these justifications would indicate reflective thinking where some claims (justifications) are judged more plausible than others (King & Kitchener, 1994).

A major focus of the cause was finding alternative solutions and making the decision itself. The process of arriving at a solution/decision and how the critical thinking process might be useful when making future decisions in the "real world" could enhance student learning in this course. The hectic pace of student's lives and focus on their careers as well as the risks involved in questioning the status quo, can prevent some students from in-depth critical thought (Shor, 1992). Students did not see/accept that how they justified their point

of view was important to convince the audience/client of their decision and to show accountability for their decisions. In the real world, justifying their decisions, convincing their clients, and showing accountability for their decisions, all are expected of managers. When students are stimulated with explicit "real world" examples and coached to present convincing arguments with sound reasons, they will be prepared to exhibit accountability in the "real world." According to Brookfield (1991), educators and students can obtain important benefits from practicing the critical thinking process in the safe environment of their classroom. This practice avoids the negative consequences that might be experienced in the "real world" as a result of the decisions made.

Classroom Environment/Culture

The second research question in this inquiry was: "What aspects of the classroom environment/culture help or hinder the critical thinking process by hospitality students?" Qualitative data are presented from one management classroom. All 13 students in the class participated in the research during the fall of 1995. In the interviews, students were asked questions about the classroom culture. Themes from this research identified classroom environment/culture as a set of physical (e.g. seating arrangement) and emotional or social (e.g. students' relationship to each other, instructor's interaction with the students) components that class members share.

This inquiry concentrated on the students' perspectives and perceptions related to the research question. Some of the responses will have to be evaluated by the course instructor for compatibility with the course objectives. Transcripts of students' interactions in the classroom (T), written documents (W), and especially transcripts of individual interviews (I) were analyzed. Additional information came from journals (J) written by the researcher and her research assistant. Seven themes about aspects of classroom environment/culture that affected the critical thinking process of students emerged and are shown in Table 2. In keeping with the nature of qualitative research, the presentation and discussion of the data emphasize the thick description of the themes, and do not quantify the data.

Table 2

Classroom Environment/Culture that Affected the Critical Thinking Process of Students

Theme	T^a	W^b	I^c	J^d
Classroom seating[e]		X		X
Makeup of the group[g]			X	
Organization of the class[g]			X	
Preparation by students[f]			X	X
Cooperation among students[e]	X	X	X	X
Expression of differences[g]			X	X
Role of instructor[e]			X	X

[a]T = Transcripts of students' interactions in the classroom. [b]W = Written documents (essay exams. quizzes, reaction papers. guidebook, extra credit assignments). [c]I = Transcripts of individual interviews. [d]J = Journals written by the researcher and research assistant. [e]Help. [f]Hindrance. [g]Both help and hindrance.

Classroom Seating

The classroom seating arrangement was selected to facilitate discussion of the case studies and data collection. The U-shaped configuration allowed the students to see each other and the instructor and to talk back and forth, as well as to view videotapes and presentations. The instructor stood or sat at table within the U and walked inside and outside of the U, during the class time.

One student suggested a square or circular seating arrangement that would include the instructor at the same level as the students. According to the student, this would facilitate better discussion because students would have the same level of eye contact with the instructor and each other. However, the instructor (Interview) believed students would still view her as an instructor rather than as one of the participants in the discussion. The confidentiality of evaluation by the instructor of the students as they participated in the discussion also had to be considered. This suggested arrangement also might pose a challenge when the instructor wanted to use a TV/VCR, overhead projector, or chalkboard (Researcher's Journal).

In the traditional classroom, with seats in rows, students would have had to turn around to see each other as they discussed a case study. They liked being able to feel connected to each other. The seating arrangement helped them feel like they were in a setting like the one they might experience on the job.

- It is good to be able to look at everybody, [and not at] the back of somebody's head ... when they are talking. (G, Interview #1, p. 7)
- We need to see everybody and its close enough together that you kind of feel like a small unit .... like you are having a meeting ... In big hotels you have a big meeting table and everybody sits around [it] ... so its kind of the same atmosphere. (F, Interview #1, p. 5)

Students thought eye contact with the person talking showed that they were listening to what was being said. They looked directly at the person, whether a fellow student or the instructor, when they responded (Researcher's Journal). One student pointed out that having eye contact was part of communication. A second student pointed out that having eye contact was part of being able to interpret another person's body language.

- To be able to see who is speaking ... even if you don't agree with that person, you can look and say, 'Well, I don't agree with what you say.' I can see that person face to face as far as you need that for communication. (F, Interview #1, p. 5)

- People communicate things with their bodies ... I could close my eyes and listen, [but] you can't see if people are saying something they really feel. (K, Interview #2, p. 5)

Make-up of the Group

The characteristics and personalities of participants affected classroom dialogue. Most of the students indicated that usually nothing held them back from saying what they wanted to say during the case study discussions. However, some students would hold back if others became defensive. Most were willing to reflect on and rethink their position during and after the discussion.

- I will stop saying, though, if I feel that I'm wrong .... I need to rethink what I said and .... I'll stop and I'll think about it, and then I'll say something after I learn from what they said. (G, Interview #1, p. 7)

- I think there is too much peer pressure in the group .... We either agree or disagree, but we don't keep the conversation [going] and we don't debate the issue. I think people are nervous, myself included ... about giving a wrong answer or being ridiculed for an answer, so that prevents people from saying things. That's why [the instructor] often has to lead us along ... you don't want to contradict your friends .... go against them ... make fun of them .... But in this class, it seems that if you contradict someone or catch them on something they said, they get really defensive. (H, Interview #1, p. 3, 4; Interview #2, p. 4; Interview #3, p.1).

- If they are shy they probably aren't [going to play devil's advocates]. Maybe they are thinking they are going against the crowd. ... Maybe some think they don't fit into the group .... Some people are more assertive or more of an outgoing personality than others, and [others] just kind of sit back and wait till [the instructor] asks them a question .... maybe the student who thinks someone is dominating the class also

shows that they are not saying much at all. (B, Interview #1, p. 7; Interview #2, p. 6. 7; Interview #3, p. 3)

Others defended their way of participating in the case study discussions. Some students preferred to be called on and answer specific questions. Both students and the instructor (Interview) suggested that students were so accustomed to passive learning that some of them felt a little awkward participating in a classroom dialogue. Some students opted to keep quiet until they were sure what the answer should be. The instructor (Interview) pointed out that some students "put a lot of thought into what they are going to say" and "self evaluation of their own answers" resulted in their decision not to contribute to the discussion (p. 1. 5, 6). But some students still believed everyone should participate to share their thoughts.

- If you are more outgoing you tend to respond quicker .... I had to be more or less called on to answer and sometimes other students will say exactly what I'm going to say so ... I'm ending up saying [nothing]. If [it] is more casual, not in the classroom setting, then I could probably react quicker. [In the classroom,] you want to come up with the correct answer.... I'm not gonna say till I ... figure it out in my head. (A. Interview #1. p. 4, 5; Interview #2, p. 6; Interview #3, p. 4)

- I don't consider myself a shy person but [I'm not] completely outgoing either .... more of a 'raise your hand and be called on' type of a person .... from kindergarten through high school you raised your hand and you're called on.... I feel kind of awkward speaking out .... certain people do dominate and talk so a lot of time I got tons of ideas in my head but ... they just started blurting everything out. so there go all my ideas .... Its just a matter of getting used to a different way of approaching it. I guess. (F, Interview #1, p. 4)

- I have a lot of strong opinions, as everybody knows. I don't see how everyone could sit in class and not express those [opinions] .... I think everybody should be participating cause we're all going to be professionals very soon. We need to know each and everyone's thoughts. (M, Interview #2, p. 3)

According to the students, the classroom atmosphere was relaxed.

- I can't speak for everybody, but I'm not sure anybody in the class feels threatened .... The atmosphere is [safe] enough that everybody could say something and ...[others] will not jump on their backs or something. I think it is pretty relaxed. (K, Interview #1, p. 4)

Organization of the Class

Students offered their thoughts on how to improve discussion. They suggested calling on students who did not participate much, asking students to elaborate more on issues, having more group case presentations, having in-depth written assignments, and having students lead case study discussions.

- [The instructor] should pick on people. Maybe more people will read the case and think about the case harder and want to talk cause if you pick on [different students], they gonna be scared and read and study. If you [don't pick on anyone in particular] ... I may come in and read the last two minutes and [decide] 'Forget it. I don't read this one because I don't want to.' I won't talk then. (C, Interview #2&3, p. 7, 8)

- Students raising their hands kind of discourages ... group discussion .... This class is about hearing what other people have to say, what the instructor has to say. When you get to raising hands, it becomes less of a discussion and just a question and answer session. (B, Interview #3, p. 2)

- Maybe [the instructor] could call on and say 'Can you elaborate on that a little bit further?' and maybe I'll have a different point of view .... This group thing is a good idea [because to prepare for it] we got everyone involved and everybody had to talk, present, and get evaluated. (J, Interview #2, p. 5, 6)

- But as far as good participation from the class, I think [the group presentations are] a lot better than some discussions we have because they know they are being watched on how well they participate, and the group knows that they are getting evaluated on how they get the group to discuss. (J, Interview #3, p. 2)

- [The instructor can] have a little assignment about [a particular topic], discuss it in class, then have [the students] write related to what they talked about. (A, Interview #2, p. 6; Interview #3, p. 4)

- Maybe we should have more quizzes. I think the tests really tell whether you know what you are talking about or not ... into depth, ... how you feel about certain things .... The best thing is to see how people are thinking. (I, Interview #3, p. 1)

- Maybe have different people present the cases rather than [the instructor] trying to lead the discussion sort of forcefully. Try to initiate one [discussion]. Maybe get us [to] break case apart into different people speaking about different parts of it. (M, Interview #2, p. 3, 4)

Students also suggested debating controversial issues in order to improve students' involvement in the discussion although in previous episodes some students mentioned their discomfort of others becoming defensive.

- Maybe if we talked about more controversial issues ...If you encourage more [participation], not by raising your hand, but just by speaking out and interrupting. (H, Interview #1, p. 4)

- [The instructor] can possibly say write or put down your opinion on this .... Maybe you could pass them around so everybody can read everybody else's opinion. Then maybe as a class you can debate the subject as a whole. (F, Interview #2&3, p. 3. 4)

They did not mind when some student who had a supervisory position in the hospitality field spoke out as long as they learned something from it. One student suggested evaluating the participation more on content than frequency even though both content and frequency were evaluated. Another student preferred that the group focus on reason assessment when they reached consensus on a decision.

- [Points toward a grade should] not [be awarded] on how many times they speak but maybe on what the content is, what it [adds] to the discussion. I think that's what [the evaluation] should be based on. (L, Interview #2, p. 3, 4)

- For example, when we all agree we should fire person X or today when we say keep the guy, go with the consequences and take the risk. I think that would be the logical choice .... [instead of more debate] just more thoughts and feelings [regarding] why we pick that choice. (J, interview #1, p. 4)

Preparation by Students

Students viewed preparedness as an aspect of motivation. During some case discussions, some students kept quiet the whole class time and others could not retrieve case study information when asked by the instructor (Researcher's Journal). Students were expected "to apply theories they learned" in prerequisite classes while participating in the case discussions. They had the opportunity to "put themselves in the decision making role" of middle management and to see "how they could make changes" in particular case studies. They also had the opportunity to "see beyond what typically takes place" in the work place and to "look at situations more critically" (Instructor, Interview, p. 1-3). However, the classroom interaction did not meet the instructor's and some students' expectations because not all students were well prepared for discussion. According to the students, besides not being well prepared, there also was lack of enthusiasm at times for getting involved in the classroom dialogue.

- I think it's all a matter of who is prepared for the class .... Right now some have a lot of tests ... so I think we are not totally prepared. (D, Interview #2, p. 5)

- Not everybody is enthusiastic .... Maybe they don't like to do a lot of reading...not really enthusiastic about getting involved. I don't think any student is as enthusiastic as the instructor is. Well, from what I notice, it seems in a lot of classes ... [students] just want to come in, do the stuff, and leave. (A. Interview #1. p. 5. 6)

- I know a lot of them are more laid back than I am. I'm more serious. and I know a lot of them have just as much experience as I do .... It just seems like people don't take classes in general seriously enough. (B. Interview #1. p. 6; Interview #3. p. 3)

Cooperation among Students

Cooperation among students through collaborating, helping, assisting, and taking turns in the discussions facilitated the critical thinking process in the classroom. It also helped foster interaction among these students. It also showed students were listening attentively not only to the instructor but to each other (Researcher's Journal).

In one class discussion, the instructor asked what kinds of evidence could be gathered to prevent a discrimination suit in hiring new employees. One student answered:

- Paper work. (K, Tape #8, p. 1)

The answer was not very clear so the instructor asked again and got the answer:

- Notes, questions. (K, Tape #8, p. 1)

Other students also volunteered answers like:

- Reservation forms. (H, Tape #8, p. 1)

- References from past employers. (B, Tape #8, p. 1)

The following excerpts illustrate how students cooperated with each other as they pursued concepts related to the case. One student said that a good manager would realize that employees had lives outside the workplace that needed accommodation. But the other student was told as an employee to leave her personal life at home.

- I was told by a manager ... one of the first things in orientation was "don't bring your personal life to work." And I don't know whether that was his way of dealing with things, or if all managers think that way or whether that's right or wrong. (G, Tape #2, p. 23)

Then, another student responded by giving an example that related back to the original concern:

- I think they say that [because if you] had a fight with your mom or your boyfriend or whatever and you're all grouchy and come to work and yell at everybody ... that's kind of crossing the line. But like [my classmate] points out, if your child is in the hospital then that's kind of a major situation ... there's kind of a fine line. If you're grouchy and have a bad attitude today, ... you do want to leave it at the door. (J. Tape #2, p. 23, 24)

The following account also suggested that assisting one another was a major component of students' cooperation. When students discussed how to discipline an employee, one student said:

- It's a drastic step, if that's the first step [in a disciplinary action] .... but definitely take the [responsibility of] ordering the alcohol ... away from him. (L, Tape #22, p. 9)

Then another student gave his reason for agreeing with her:

- [My classmate] has a good suggestion to take away [his responsibility]. He needs a little bit of discipline regarding ordering. [If you require] your signature on [the order form], you will be held responsible [for ordering the alcohol]. (E, Tape #22, p. 10)

Students' cooperation also was seen when they took turns in speaking. This showed consideration for and sensitivity to the viewpoints of others. However, one impediment to cooperation was the number of people who were trying to participate in discussion of the topic at any one time. Because dialogue is an important element of learning in this class, it is imperative that even shy students be able to contribute to the discussion.

During one case study discussion, when the instructor asked how to prevent lawsuits against the company, a student answered the question. Another student had the same thought, but because the other student had already mentioned what she was going to say, she admitted that she had the same thought and said so.

- Review the application [form]. (B, Tape #7, p. 4)

- That's what I am going to say. (J, Tape #7, p. 4)

The importance of taking turns was pointed out by a student when discussing a particular situation in a case.

- [The manager] shouldn't interrupt employees while they are talking. (E, Performance Appraisal Extra Credit)

Taking turns demonstrates dialogue etiquette as well as tolerance and patience. In another instance, the class was sharing information on violence in the workplace. Several of the students as well as the instructor were sharing information from the news. One student did not want to interrupt the discussion, so he first got permission.

- I have something to add to that. (E, Tape #6, p. 8)

Another student at one point said:

- I'm going to say something, but I don't want to interrupt. (M, Tape #9, p. 5)

Expression of Differences

Students had diverse work experiences. Some had worked in foodservices and restaurants. Others had experiences in hotels and country clubs. Some students were very proud of their work experience (Researcher's Journal) and kept emphasizing that experience.

Although it might seem evident, they kept emphasizing that the business world differed from the classroom environment. Two illustrations are given here.

- If I were them I would be doing the same thing. It's all part of the business. Once you are out in the real world, ... how you make connections [and] keep connections .... is just a matter of knowing how to play the game. (D. Interview #2, p. 4)

- You do it the way you need to do it to get it right, to get it figured out .... Nobody uses the book in the industry. They [do] their own thing ....You don't use the cook book to cook. You close the cook book. .... [To make the] potato salad you do your own little thing the way you like it or ... you always made it so the customer seems to like it .... you don't [measure every ingredient perfectly] in the real world, you just throw it in there ...That's why I think a lot of employers that hire students out of college look for more experience then they do book [learning] .... Books are not a major part of our industry. Getting the diploma, getting out there, and getting experience ... that's the key to being really successful .... Books help, school helps a lot, it's not just experience .... but a lot of the stuff that goes on in clubs, hotels, restaurants, its not like detailed book stuff .... Its completely different ....You try to implement that book idea of solving the problem, it ain't gonna work. (C, Interview #1, p. 6, 7, 9)

Some students were aware of what Brookfield (1994) called "cultural suicide," the recognition that challenging conventional assumptions risks cutting people off from the cultures that have defined and sustained them up to that point in their lives. Some of the students indicated they had difficulty in trying to contribute divergent points of view while discussing the case studies. Mostly, students who had work experience seemed to think their answers had more credence than other answers.

- [Guests] needed to check out right away, and the front desk clerk said he would mail them their bills. Certain people in the class said they would never mail a bill, that it's rude. Well, I worked in a hotel for 4 1/2 years .... It's doing everything for that guest and to make the stay pleasant, and 99% of the time they were very glad that you were able to mail them their bill .... I know one individual that was very out-spoken [about

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how to handle the situation] has never worked in a hotel, so that's part of [the reason she said what she did]. (F, Interview #1, p. 4)

Others tried to avoid conflict and left resolution of the problem open to different interpretations:

- We all have our own experiences and a lot of times the experiences are the same, but the outcomes are different so that influences how we explain our responses or express our viewpoints. Like the situation I described in the class yesterday, about where I cut off somebody else from the party because of the alcohol. If somebody else ... kept serving them alcohol, the outcome would have been different. You would have more guests ...out of hand and would have more unhappy guests, and of course you could have endangered those people who had too much to drink [and others]. (B, Interview #1, p. 7; Interview #2, p. 5)

- [One of the students in the class] was saying "Fire her" and ... "she's no good to the company," so I said maybe they can find another position for her where she'd be able to do the job. She had kids, she needs the job .... To me that was from past experience ... When I did an internship, I was in housekeeping ... cleaning bathrooms all summer ... I was not that good at it ... I asked for another job, so they got me moved to laundry ...To me that's just how I thought about the case. If the lady can't do the job, then find another position for her because she still needs the job. (E, Interview #1, p. 7)

They believed it was good to hear different points of view because it enriched their learning experience. A student described how she learned from open discussion.

- I think people learn a lot because you hear other students' opinions on how a problem should be solved .... Maybe you didn't think about that, or maybe ... I thought about it, but I wasn't sure how to go about doing that, and maybe they have thought about that. (J, Interview #1, p. 6)

The students admitted they did not like to confront their classmates. However, the following evidence showed they did contribute divergent views on several occasions. One student even admitted acting as a devil's advocate to make the conversation more interesting.

He wanted to see how others would react to his view even though his view might not be right.

- Sometimes, I say things just to get the rise out of [other students]. Just to be devil's advocate .... Just to see how they react and maybe give a little spice to the conversation. Make a little more interesting. Just to see, give a different view, and see how they react to my view even though I may not be right. to see how the reaction goes [and how] they handle it. that's all. (D. Interview #1, p. 4, 6)

Role of Instructor

Students thought the instructor knew the subject matter well. The instructor had been teaching or facilitating the case study discussions for some time (Researcher's Journal). The students also acknowledged this fact. According to the students, the instructor listened, offered viewpoints, provided a lot of good input, asked questions. and guided the conversation toward what the instructor wanted the students to discuss.

- I think [the instructor] does a good job presenting cases to us.... challenges us on what we think .... makes us think further [about] what we were discussing [and] not to look [just] at surface but detail .... try to make us thinking people ... [to] think of different possibilities rather then one solution that may or may not work. (M. Interview #1, p. 4)

However, some students preferred to discuss the case study without much input from the instructor. They were interested in having the instructor motivate them to become involved in the discussions.

- If the instructor had not talked as much ...if [the instructor] said up front ... you need to come up with your own questions, and then would sit back and listen. Maybe a couple of times ask questions when somebody misses .... It's our class, and we paid for it. We were there to learn so it's our responsibility to perform a little better, I guess. (B, Interview #2, p. 6)

Another student questioned whether the class could stay on target if the instructor did not ask questions. If the instructor let the students discuss the case studies by themselves, the

student thought there would be uncomfortable periods of silence. There were tense moments when everyone expected someone to say something first (Research Assistant's Journal).

- I like that [the instructor] kind of lets [us] just speak at random, openly, and does keep asking questions to keep us moving. Otherwise, we [would] probably drift off ... [to] different things that are unrelated. (L, Interview #1, p. 4)

- I think [the instructor] does a good job guiding the discussion. So I don't mind when [the instructor] always asks us questions. (K, interview #3, p. 4)

Some students' responses concerning their group case presentations confirmed that they welcomed the instructor's questions during these discussions.

- I know [some] groups had less information and less to talk about, and the instructor tries to give them more to work with, like coming up with more questions ... [The instructor] knew what [he/she] wanted to talk about and [when] there is like a lull in discussion, [the instructor] will come up with something new .... [The instructor] helps pull people into the conversation like ... [the instructor] did with all of the groups. (K, Interview #3, p. 5; Interview #4, p. 3)

- [During our group presentation the instructor] let us lead and ...[the instructor] intervened maybe two times [with] supplementary questions that we hadn't asked. I don't know what the other group members or other classmates thought about [the instructor] asking questions, but I think it was a good thing. It helps some of the discussion. (H, Interview #3, p. 2)

- I think [the instructor] did a pretty good job, trying to stay out of it, letting the groups ask questions, and letting students respond. But I didn't object when [the instructor] did ask questions because what we left uncovered by questions [the instructor] brought in, and I think that helps. Probably good that [the instructor] does it now and then but not as much because that's the group's responsibility to come up with questions. (B, Interview #3, p. 2)

The students acknowledged that they accepted the instructor as the authority figure in the classroom. However, they recognized that the knowledge the instructor provided was only one source of information. They pointed out that the knowledge the instructor provided was proven management techniques and theories from books. Most students said they would

use subject matter knowledge acquired in the classroom only as a base, a steppingstone, or a guide to apply in their decision making.

- I am only 22, and I don't have enough experience so I think it is important for us to listen and consider what people have to say, especially our teachers ... I think things are very situational, but its good to have [theoretical principles as] bases, and we can take from what we learn and just keep that in our mind when we have situations arise. We sort of remember past things we have listened to or experienced and then take that basis and apply [it] to what is going on at the present time. (M, Interview #3, p. 1)

<u>Summary for Research Question Two</u>

The individual interviews with the students were particularly helpful in answering the research question about aspects of the classroom environment/culture that helped or hindered the process of critical thinking by the students. The seven themes of classroom environment/culture that emerged from research data included classroom seating, make-up of the group, organization of the class, preparation by students, cooperation among students, expression of differences, and role of instructor. These themes are now discussed according to whether they helped or hindered critical thinking by the students, or both. Findings reflect the perceptions and perspectives of the 13 students in one management classroom in the Fall of 1995. The data are presented in thick descriptive form and do not quantify the data.
<u>Help</u>

Those aspects of the classroom environment/culture the students found most helpful in facilitating critical thinking were classroom seating, cooperation among students, and the role played by the instructor. Most students believed the U-shaped seating arrangement assisted in eye contact among all group members and was desirable for discussion of the case studies. These students felt that having the classroom chairs arranged in rows, which was typical of many college classrooms, would not facilitate the learning desired.

Cooperation among students included taking turns in speaking, listening to and elaborating on others' comments, and providing examples to clarify others' statements.

Collaborating, assisting, and helping one another to expand or strengthen justifications for their decisions and points of view increased classroom dialogue.

Students thought the instructor played a role in motivating students. Some thought the instructor's approach to beginning the discussion each class period with questions and guiding the discussion was good. The instructor knew what needed to be learned. Other students thought the instructor might have tried to motivate students to be more responsible for their own learning. The students could be responsible for guiding the discussions and asking the questions.

Hindrance

One aspect of classroom environment/culture that hindered critical thinking of the students was preparation by the students in the class. Explicit probing by the instructor helped engage students in critical thinking and increased the number of solutions, decisions, or points of view the students put forth. In most instances, the small number of students in the class and their homogeneity allowed participation by all, if they chose to do so. Because the students were being graded on participation, they made an effort to speak out, sometimes without too much advanced preparation. Preparation by the students before the case study discussions, including seeking additional credible information to supplement case study information, would enhance their use of the critical thinking process.

Both Help and Hindrance

Some aspects of classroom environment/culture such as make-up of the group, expression of differences, and organization of the class were both a help and a hindrance to critical thinking by the students. Most students were comfortable with their peers and the role played by the instructor in facilitating the class discussions.

Students' characteristics, personalities, and perceptions about their peers played a role in influencing how they participated in the discussions. The reason for a student not participating might be because he/she was not well prepared for the discussion, was not enthusiastic, or was not the outspoken type. But there also were students who were mentally participating by paying attention to others' comments. They were agreeing or not agreeing with others but not verbalizing their thoughts. A study by Townsend (1998) contained in-depth interviews of four different "silent" students in the classroom - two normally chatty and

two usually quiet students in other situations. She concluded that students who were quiet during class discussions might be doing important mental work. One student in the current class, who seemed to be very shy and nervous about speaking in class, could have contributed good ideas (Research Assistant's Journal). This student obtained high scores for essay exams on case study decisions (Researcher's Journal).

Some students admitted having difficulty challenging another's point of view or providing a divergent perspective. Evidence for this related back to perceived peer pressure as well as personality and thinking style of the students. Peer pressure is often a hindrance to the sense of community within a group (Brookfield, 1994). However, there were some challenges from the students to ideas expressed by their peers and the instructor. There also were occasional instances when a student played devil's advocate. The instructor's (Interview) intention was for the students to realize that there were many different ways to approach a case. The instructor tried to create a learning atmosphere where students could learn from different points of view. Some students valued disagreement/conflict of ideas as opportunities to learn from different points of view, backgrounds, and experiences. According to the instructor, former students have commented, "I have learned from what others have to say ... [so when] they start to make decisions they look at different ways" (Interview, p. 9).

Students offered their perspectives on how to enhance the organization of the case study discussion class. Some students thought they did their best critical thinking when writing an exam or preparing for their group case presentations. Writing down their ideas required more clarity of thought, and students could demonstrate strength in their justification in defense of their answers as well as their thinking process. But many preferred to talk rather than write because writing consumes more time and effort. Therefore, availability or willingness to spend time on preparation of the case study also affected participation in the discussions. In order for all class members to benefit from information not shared by "silent" students, ways to involve them in the dialogue could be pursued by both the instructor and students.

Some students wanted to see more debate among the students, but others felt discomfort with the oppositional nature of debate. These students did not realize the

differences between debate and dialogue. The expected nature of the interaction among the students in this class was dialogue. Dialogue includes showing collaboration, displaying open-minded attitudes, willingness to reevaluate assumptions, and searching for strengths in other positions (Andrews, Paschall, & Mitstifer, 1993).

Students who presented the group cases expressed pride in their ability to facilitate a dialogue. The remaining students who participated in these dialogues showed interest and enjoyment in the whole process (Researcher's Journal). Preparing the group case presentations was viewed by the students as valuable and also increased confidence in their abilities to complete a complex task successfully.

Students volunteered perspectives on how participation would be evaluated for a grade. Some students as well as the instructor in this study thought quality of participation was as important as quantity. Students suggested elaborating further if the idea was the same as another student's. The instructor differentiated between quantity and quality of students' contributions to discussion. There were students who "will comment on something and they will expand and they will tell why they felt that, while others will just comment .... One said this is it, and the other one said this is it and this is why" (Instructor, Interview, p. 9). Even though the emphasis of the evaluation was on the content of contributions to the dialogue, a student made this comment, "[points toward a grade should] not [be awarded] on how many times they speak but maybe on what the content is, what it [adds] to the discussion. I think that's what [the evaluation] should be based on" (L, Interview #2, p. 3, 4).

SUMMARY

The research questions addressed in this qualitative inquiry were:

1. How do hospitality management students demonstrate the process of critical thinking when making decisions about management case studies?

2. What aspects of the classroom environment/culture help or hinder the critical thinking process of hospitality management students?

The naturalistic setting was a single management classroom at one university in the fall of 1995. The class involved 13 hospitality management students making decisions related to case studies discussed in the classroom. The critical thinking process was not explicitly taught in the course, but many elements of the process were used by the students.

The research inquiry was to uncover the perceptions, feelings, behaviors, and background knowledge of students involved and to observe the critical thinking process in decision making within the context of a classroom setting. The emphasis was not on data from or observations of the instructor. Qualitative inquiry was chosen because it is a discovery-oriented approach that minimizes researcher manipulation of the study setting (Guba, 1978). It also was appropriate for depicting a detailed description of participants' perceptions, behaviors, and experiences (Chacko & Nebel, 1990; Glesne & Peshkin, 1992; Marshall & Rossman, 1995; Patton, 1990). In qualitative inquiry, the researcher is the primary research instrument for data collection and analysis (Merriam, 1988).

Qualitative data were collected from five sources: a demographic questionnaire, transcripts of students' interactions in the classroom, individual transcripts of interviews with students and the instructor, written work of the students (examinations, quizzes, and written assignments), and fieldnotes of two class observers (the researcher and the research assistant). The content analysis process involved the constant comparison of the data.

Fourteen broad themes regarding the critical thinking process demonstrated by the students and seven themes concerning aspects of classroom environment/culture that affect critical thinking by the students emerged from the data. The 14 broad themes were organized using a three-part definition of critical thinking. These parts were: information/knowledge (case study evidence, evidence of subject matter knowledge, work experience evidence,

personal experience, context/time), critical spirit (empathy, open-mindedness, embedded assumptions, beliefs, values, personal ethics, norms of leadership), and reason assessment (challenging justifications, acknowledging differences). The seven themes related to the classroom environment/culture were: classroom seating, make-up of the group, organization of the class, preparation by students, cooperation among students, expression of differences, and role of instructor.

In keeping with the nature of qualitative research, the presentation and discussion of the data emphasize the thick description of the themes and do not quantify the data. Such words as "some," "a few," "the" in reference to the students in this study mean more than one student, but no specific number can or should be attached. The important point of reference is the theme.

Research informants were homogeneous in the sense that all were native language speakers, single, and upper-level undergraduate university students in a hotel, restaurant, and institution management major. Seven were female and six were male. They had a variety of work experiences ranging from 9 months to 11 years, including part-time as well as full-time employment in hotels, restaurants, and clubs. A subject-matter course was a prerequisite for this course. Students were considered to have adequate formal subject-matter knowledge and work experience to participate in the case study discussions and classroom assignments.

Students described themselves as extroverts although some students found it difficult to challenge or question another's point of view and to provide divergent points of view themselves. They described themselves as empathetic persons with high levels of cognitive ability and good work ethics. They described their best bosses as empathetic, having excellent work ethics, and showing confidence in and holding high expectations of their employees.

In discussing the case studies in the classroom, students usually did not initiate the first question, but waited for the instructor's lead in starting the discussions. Academically committed students read the case studies two to three times and thought carefully of alternative solutions and decisions to be made before the actual classroom dialogue. Others liked to get the general idea of the case study beforehand but waited for their classmates' reactions and the instructor's questions before making a contribution.

Students accepted the importance of thinking in general and acknowledged the need for critical thought. Students used the word thinking when asked for their definition of critical thinking - specific thinking, detail thinking, in-depth thinking, important thinking. They also considered critical thinking as spur-of-the-moment thinking and instinct thinking, that emphasized efficiency and intuition. According to them, it involved activities such as problem solving, reasoning, and analyzing. Critical thinking involved the skills of listening, asking questions, explaining in depth, expanding on questions, and getting ideas from everyone involved through discussion. The critical thinking process for these students seemed to involve these steps: looking for answers, weighing alternatives, considering implications and consequences, and arriving at a best solution. Students viewed themselves as demonstrating critical thinking when the instructor asked them questions, and they had to draw their own conclusions with justification.

<div align="center">Research Question One</div>

Research question one was: How do hospitality management students demonstrate the critical thinking process when making decisions about management case studies? The answers to this question were organized by three components of critical thinking: information/knowledge, critical spirit, and reason assessment. The data revealed 14 broad themes that describe the critical thinking process demonstrated by the students.

Information/Knowledge

Students used various sources of evidence in reaching conclusions related to the problems presented in the case studies. They took into account the total situation described in a case and used as much evidence as possible from the case study to justify their decisions. The largest amount of evidence for justification came from the case study information. Students acknowledged that information provided was not always clear in the case studies, and more information was needed. They recognized that the lack of information desired might happen on the job. They acknowledged that as managers they might not always know the whole story. They reflected on these limitations and asked for additional information and clarification from each other or the instructor, but not from outside credible sources.

Students restated their peers' statements, or summarized other students' statements, or explained with examples.

Students mentioned family, friends, colleagues, or superiors as sources of additional information or clarification. But few written sources were mentioned. Trade journals were identified as a source but not current research or management theory that could be found in academic journals or other documents. Information from interviews with effective managers and subject-matter experts also were not identified.

In addition to information provided by the case study, students also used formal subject-matter knowledge, work experiences, and personal experiences. Students were able to transfer their work and life experiences as well as subject-matter knowledge to situations in the case studies where they were applicable. They sometimes used subject-matter knowledge from other management classes, but made little use of specific sources available to them with some effort, e.g., professional journals.

Students listened and gave serious consideration to evidence and points of view expressed by others when making their decisions. One student's application of learned knowledge sometimes triggered others to suggest different applications. Work experience was considered important by all students. Differences in work experiences of the students may have resulted in differences in intensity of involvement in the discussions. Some students believed the amount of work experience also seemed to influence the credibility of the student's input. However, students with little work experience could participate and interact successfully in the critical thinking process of classroom dialogue using personal experiences.

Students' ability to use the critical thinking process depended on relevant information provided in the case study and relevant knowledge available to them at the time. Outside sources to justify their decisions were seldom used, and when used were seldom questioned for their validity. Credibility of sources did not seem to be important to the students. Dialogue to reach consensus on a solution in the case that would be agreeable to all affected by the action taken would provide students valuable practice in using credible sources to justify their decisions.

Context of the situation was a major consideration in the discussion. Most students believed that they would have to make many decisions in a short period of time. They felt that the more quickly they dealt with the problem, the more likely they could avoid the consequences of a more serious problem developing. Using intuition or "gut instinct" was considered appropriate when they did not have sufficient information or had to meet a time constraint in making their decisions. Data did not provide evidence that the processes they were learning in this course could be internalized through practice and would enhance their ability to use the critical thinking process to respond quickly and responsibly to situations they might encounter on the job.

Critical Spirit

A critical thinker with a critical spirit has these characteristics - independence of mind, open-mindedness, wholeheartedness, intellectual responsibility, and respect for others (empathy). The critical spirit component of the critical thinking process was demonstrated in students' empathy and open-mindedness. Empathy was identified by their acknowledgement of the importance of listening, showing compassion and concern, and taking turns in the discussions. By reflecting on their own expectations, students tried to put themselves in the shoes of the characters in the case studies. Students not only advocated open mindedness but also practiced it. Some students were not afraid to admit their limitations and mistakes in front of others. Being open-minded allowed students to be tolerant of divergent views and fair-minded in their evaluations.

Influences on critical spirit were seen in students' embedded assumptions. Their beliefs, values, and personal ethics influenced their decisions. Students recognized the influence of their backgrounds on their beliefs. Their values were reflected in their work ethic. Students recognized that personal ethics were important but were not always sure how they should deal with differences in personal ethics. Ethical decisions would be made differently according to whether the decision was made by themselves, they were pressured by a colleague or a superior, their jobs were on the line, or the company and other people would be hurt. Students accepted certain norms of leadership, the characteristics required of an effective manager or leader. Underlying these norms were managers they had known. During classroom dialogue, students rarely questioned assumptions, beliefs, values, or

personal ethics different from their own even though they were a relatively homogeneous group. They seldom resolved any case through arriving at consensus, but seemed to endorse a relativistic approach to decision making.

Reason Assessment

Challenging others' justifications and acknowledging different ways to justify decisions were the means by which these students assessed reasons for a decision. But critical thinkers recognize that some reasons are better than others. Therefore, other means to assess reasons would strengthen their decision-making.

Students had little difficulty identifying the problem in a case study, analyzing information related to the case study, and generating alternative solutions or decisions of what they would do in that particular situation. However, students' contributions were not automatically accompanied by the justification for their solutions or decisions. Often, they only gave their justifications and defended their answers if the instructor asked them to do so. When the scenarios related to their personal and work experiences, students readily offered decisions, opinions, or conclusions along with justifications and examples based on their experiences. Assessing the credibility of justifications (given reasons) was seldom evident.

According to the students, knowing how to handle actual problems in the "real world" was more important than getting top grades and rigidly applying theoretical principles in the classroom. Different people would have different ways of handling things. Situations would be different. For the students, opinions/personal points of view depended on an individual, his/her personal knowledge, values, beliefs, and different experiences. Therefore, students claimed that there were no "right" or "wrong" answers to the case studies. This gave the impression that all answers were equal in quality.

The students did not see that content (often identified as opinions/personal points of view) did differ in quality because good content is supported with reasons from credible sources. The process used to justify solutions/decisions to audiences/clients shows accountability and is equally as important as the generated solutions/decisions. The process of arriving at solutions/decisions and how this process would be useful when making decision in the "real world" did not seem to be evident to the students.

A connection between processes learned and practiced in the classroom and their application in the real world needs to be made obvious to the students. This could be done with some intentional inclusion of aspects of the critical thinking process.

Research Question Two

The second research question in this inquiry was: "What aspects of the classroom environment/culture help or hinder critical thinking process by hospitality management students?" Classroom culture is an important factor in the development of a student's ability to learn to reason critically. The seven themes of the classroom culture identified in this research were classroom seating, make-up of the group, organization of the class, preparation by students, cooperation among students, expression of differences, and role of instructor.

Students favored a classroom arrangement that helped maintain eye contact and enhanced classroom dialogue. This allowed students to show politeness in listening to what was being said and to interpret others' body language. The U-shaped seating helped create an atmosphere of being part of a meeting or discussion at a job setting. A square or circle seating which included the instructor at the same level as the students was suggested by students as an alternative in facilitating better discussion. However, the students probably would still view the instructor as an authority figure (expert) rather than one of the participants in the discussion. This arrangement also might pose a challenge in using the TV/VCR, the overhead projector, the chalkboard as well as maintaining the confidentiality of the instructor's evaluation of the students participation in the dialogue.

The make-up of the group affected the comfort level among the participants of the case studies discussions. The critical thinking process of these students was affected by their perception of peer pressure, their willingness to express divergent views, and their willingness to share what might be considered wrong answers in front of others. The personality of each student (whether assertive and outgoing or shy and quiet) and his/her style of thinking (whether thinking quickly and speaking out or analyzing thoroughly before speaking out) affected the classroom dialogue. Students held back what they were going to say if others became defensive. They were reluctant to offer decisions/opinions/suggestions quickly. Some students said they participated mentally by paying attention to what others

were saying and deciding whether to agree or disagree with them. Some were willing to change their views or decisions if another student presented persuasive reasons or evidence. Most were willing to reflect and rethink their position during and after the discussion. Students said they were accustomed to passive learning and felt a little awkward participating in a classroom dialogue. Although some students believed everyone should voluntarily participate and share their thoughts, some preferred the instructor to call on them. The students focused more on the instructor's role in encouraging participation than on how they themselves could play a part. But if the instructor called on specific students, the evaluation process could be compromised.

Students were asked to comment on how the class was organized. They offered suggestions on how to improve the contributions of students in the discussions. Students suggested introducing cases relevant to their experiences, calling on students who did not participate frequently, asking students to elaborate more on issues, having more group case presentations (with group-written cases), having in-depth written assignments, breaking the case study into parts and letting different students lead the discussion of each part, and debating controversial issues. Some students thought they did their best critical thinking when writing an exam or preparing for the group case presentation. Writing thoughts required more clarity than verbalizing them. But many preferred to talk rather than to write. Students viewed preparing their group case presentation as a valuable experience that increased confidence in their ability to successfully complete a complex task. Students acknowledged that they learned by sharing their experiences, knowledge, and points of view.

Students considered preparedness as an aspect of motivation. Both the instructor and students agreed that some of the students were not well prepared and were not enthusiastic about contributing to the case study discussions. Class discussion would be most effective when all students prepared thoroughly before the classroom dialogue. Thus, a student's ability to use the critical thinking process when making decisions about the case studies depends on the students' willingness to spend time in case study preparation. The students were satisfied with the information provided in the case study and the relevant knowledge available to them at the time. They did not consider it necessary to seek additional information.

Cooperation among the students facilitated classroom interaction. It included taking turns in speaking, listening to and elaborating on others' comments, and providing examples to clarify others' statements. Assisting and helping one another to strengthen justifications of their decisions and points of view increased classroom dialogue. Students who were considered to be "experts" (those who had more work experience than others or who were verbal) often were asked to help clarify concerns or to contribute information.

Some students found it difficult to challenge another's point of view. Students who had extensive work experience seemed to think their answers had more credence than other students' answers. But expressions of divergent views were seen on several occasions. Some students would have liked to see more debate during the case studies discussions. But other students preferred dialogue, sharing justifications in a rational manner. They preferred not to argue with their peers but preferred to listen and learn from different points of view. Questioning a point of view is a valid learning tool not used frequently by these students.

Students acknowledged that the instructor knew the subject matter, and they accepted the factual knowledge presented by the instructor. Students viewed the instructor as an authority, presenting factual knowledge as an expert in the discipline. According to the students the instructor listened, offered a point of view, provided useful input, asked questions, and guided the discussion to focus on what students needed to learn. Evidence revealed that "what-if questions" needed to be asked by the instructor. Most students welcomed this motivation from the instructor. Explicit probing by the instructor increased the number of alternative solutions, decisions, or points of view. Some students thought they could learn by leading the discussion and asking questions with occasional guidance from the instructor.

Helpful aspects of the classroom environment/culture in this research were classroom seating, cooperation among students, and the role the instructor played. Lack of preparation by the students was considered a hindrance in facilitating the critical thinking process. Both helps and hindrances were seen in the make-up of the group, the expression of differences, and the organization of the class.

RECOMMENDATIONS

Students' expectations of higher education include acquiring as many relevant skills and experiences as possible to secure the first job, to obtain promotions, and to be successful in their chosen careers. They want higher education to provide a good foundation that will promote their career progression in a rapidly-changing world. Although educators are encouraged to help students be able to use the critical thinking process, few educators take time to determine how they will intentionally include this process in their teaching.

Implications for Teaching the Critical Thinking Process

The expectation of this course was to give students practice in the decision-making role of managers. The course was built on the practice of applying subject-matter knowledge and theory as well as students' previous work and personal experiences to management issues in simulated case studies. Although students were not directly taught the critical thinking process in this course, some elements of the process were demonstrated by these students. Intentionally making the students aware of the elements of the critical thinking process as an enhancement to the problem-solving focus of the course could be valuable to these future managers. For example, students supporting a particular position could be asked probing questions about the justification of the decision and the possible consequences for all involved in the case. If the critical thinking process is made explicit and practiced in the safe environment of the classroom, it can become part of the intuitive process the decision maker uses in the "real world."

The instructor's intention was to create a learning environment where students learn from each other and practice the use of their subject matter knowledge in simulated case studies that might take place in a typical work place. The management course when researched in the fall of 1995, had many strengths and provided an excellent environment for teaching the critical thinking process to students. Some of these strengths were:

- Small size of class
- Learning atmosphere of open discussion
- Case studies from the "real world"

- Interaction of students through dialogue

The research findings offer some suggestions for consideration in strengthening student learning of the critical thinking process as part of decision-making in this course. These include:

- Making explicit the process of critical thinking, especially the reasoning process
- Focusing more on the process and less on solutions
- Seeking additional information from credible sources
- Arriving at agreed upon ethical principles to apply to ethical problems

Students could spend some time reviewing the process of reasoned argument that some were introduced to in their freshman English composition class. A text such as "Writing Arguments" by J.D. Ramage and J.C. Bean (1995) could be used to review the argument process. Students could review arguments from published sources and write their own arguments in response.

Classroom discussions and assignments ask the students to define the problem and analyze the case study for relevant information and gaps in that information. Students offer a solution and justification. They also could be required to explain, evaluate, and defend their reasoning process. This addition might help to eliminate the disconnection between the "real world" and the classroom. The students are correct. The "real world" is not the same as the simulated case studies in the classroom, no matter how relevant they are. Each situation will be different, so decisions are likely to be different. It is the critical thinking process that will carry over from one situation to another. To introduce the students to the critical thinking process of arriving at a decision and justifying the decision with credible evidence, two professionals capable of effective dialogue about opposing views could demonstrate the process through dialogue with each other. This would be followed by questions from the students about the process.

Students could be encouraged to use additional sources for justifying their reasoning. These sources might include trade and professional journals, library references and information from the Internet. These and other sources could provide information on such areas as current research, laws, and management principles that affect the situation. They could learn to evaluate sources for credibility by developing criteria for this purpose.

In addition, to suggested recommendations for the particular class and environment studied in this research, there are some ideas all educators, who whish to teach students to think critically might consider. Education is incomplete if it only aims to establish competence in a specialized area of knowledge and does not include a social/moral aspect. Ethical decisions are often the most difficult and therefore are given only cursory time in an educational program. But, they are often a part of the on-the-job environment. Reasoned argument can play a role here also, but credible sources to assess reasons depend heavily on the ethical philosophy of the organization or the top management. Some educators have been able to use the technique of role play in teaching about ethics. Students could role play managers and employees in a case such as laying off (firing) employees, resisting bribes from vendors, or committing an illegal act such as serving liquor to a minor. The important aspect of the role play is the dialogue that follows. The dialogue would include identification of the ethical principles used in making a decision. Asking questions of those who played the parts to learn each person's perceptions and feelings can provide additional information to the critical thinking process. Decisions may or may not be changed. The focus would always be on the process, not the specific solution.

Implications for Research

The qualitative inquiry approach proved to be valuable in providing a description of the critical thinking process demonstrated by the students in the classroom and the impact of classroom environment or culture on this process. Problems encountered in this research included the limitations of case study research, occasional failure of the technical equipment, difficulty in scheduling interviews with students, and identifying the most appropriate questions for the interview.

Case study research does not allow for generalizability of these data, but furnishes thick descriptive data from one classroom of 13 students in the fall of 1995. The amount of data collected created a major challenge for the researcher in determining the most relevant findings. Data were lost from four classroom discussions. Some of this might have been prevented by checking each tape immediately after it was recorded. In addition, two sets of recording equipment could be used. It was difficult to schedule three interviews with each

student because of their tight time schedules. Identifying a few succinct and focused questions to ask students during interviews could reduce the number of interviews and their length.

The number of informants, the format of the class, and the cooperation of the instructor made possible this meaningful beginning in identifying ways to further strengthen the educational experiences of prospective hospitality managers. Possibilities for further research include exploring other classroom settings where the critical thinking process is demonstrated, studying the impact of the diversity (race, ethnicity, gender, and culture) of students on their use of the critical thinking process, and conducting a study of graduates' use of the critical thinking process in their present supervisory positions in the hospitality industry.

APPENDIX A. RESEARCHER'S BACKGROUND

As a student, I was in an ideal position to conduct an inquiry about other students' interactions during discussions of case studies in the classroom setting. Nevertheless, there were inherent concerns. Specifically, there was the danger that, because of my prior education, work experience, experiences as a student, and my cultural background, I would conduct the research under consideration with preconceived notions. The researcher using qualitative methods should conduct the research with an open mind. As the researcher who conducted the research activity, I ran the risk of interpreting data according to my own feelings, attitudes, and emotions that I had acquired during my years of experience as a student.

I am a graduate student in the same department as the research informants. If I had chosen to become a full participant as well as an observer in the class, there was the risk of my saying things that could impact the direction of the discussions. Upper-level undergraduate students would expect me, as a graduate, to participate fully in the discussions of the case studies. At some point they might even wait for my lead and form the discussion around what I said. In addition, they might become very cautious and even suspicious if I wrote down what I observed while the discussion was going on. I limited my impact on the direction of the case study discussions by being only an observer. The research intern and I sat behind the prearranged U-shaped classroom set-up and recorded what we observed.

I am originally from Burma in Southeast Asia. When I was taking courses at the university, I noticed that international students, mostly from Asian countries, tried to avoid taking this course. The course relies heavily on discussion of case studies. Some of these students achieved high grades in the prerequisite course which relies heavily on objective information. They avoided taking the course on which this research was based unless it was strongly recommended by their advisor. My assumption is that these students are accustomed to an education system where they receive information from the instructor and repeat what they recall from their memory. They do not feel comfortable verbally defending a point of view with sound reasons and evidence. I perceived they lack skill in problem solving and critical thinking processes to explain and defend their judgments. I questioned whether students born in the U.S. and accustomed to the U.S. education system would use the critical thinking process when making decisions regarding the case studies. Would they

be able to put forth well-thought-out plans of action or would they respond impulsively in the classroom?

This interest developed into a research inquiry that allowed me to observe student interactions in discussions of case studies. I was able to listen to their experiences during these interactions and to observe their critical thinking process in decision making regarding the case studies. I also was able to obtain their perspectives on the classroom culture. I exercised utmost care to ensure that my own perceptions, assumptions, and biases did not influence or interfere with interpretation of the research data. In the research findings, I recorded students' perceptions in quotation marks or indented with a bullet to indicate the source of these perceptions and to keep such observations separate from my own descriptions and interpretations of the situation.

The process of analyzing and interpreting the data in this qualitative inquiry was a lengthy and challenging experience for me. When I became immersed in the data, it became important to step back and seek external feedback from my major professors. My inquiry has helped me not only to discover the many ways in which students demonstrate the critical thinking process but also, and more significantly, it has enabled me to gain a greater understanding of students' participation in the decision making of case studies. This inquiry is methodologically significant because it has not relied upon the researcher's observations and perceptions in order to arrive at the conclusions. It has drawn upon the students' own thoughts and feelings to access their perspectives about decision making in the classroom setting. Therefore, the students themselves supplied the data which led to my conclusions.

APPENDIX B. INTERVIEW QUESTIONS

Interview #1 with Students

The written case study of Case #1 was given to the student to review. This case study had been discussed in the class before this interview. The student was asked to scan the case in the researcher's presence, and the following questions were asked. No preparation was expected of the student in advance of the interview.

- After you have reviewed the case, what do you think are the problems or issues and how would you deal with them?
- How did you make that decision?
- If you were [the owner of the restaurant chain], what would you do in this situation?
- What will you do if [one of the interviewers] asks personal questions?
- Why do you think [this interviewer] should/should not do that? What do you base this on?

You already have discussed several cases in the class.

- How did you approach/prepare for the discussion?
- How did you arrive at your decision for the case?

You already have described your decision making process as a student.

- If you become a real manager, will your decision making process be different from that? Why/why not?

In the class discussions, some students expressed confusion about information provided in the case studies.

- Do you think you had enough information or materials to make your decisions? Why/why not?
- What do you think about your classmates' reactions in the discussions?
- Have you had any conflict of ideas with your classmates when discussing the cases?
- Would you share your perception of the instructor's way of teaching or facilitating the class?
- During the case discussions, does anybody or anything make you hold back or stop you from saying what you want to say?
- Do you think you have a fair chance of participating in the discussions?
- What do you think about the classroom seating arrangement and classroom atmosphere?

Additional questions were asked to clarify/validate/expand ideas about what the student said during the case discussions in the class or in this interview.

Interview #2 with Students

This interview followed classroom discussions of three case studies involving questions of ethical behavior. One was a written case study, Case #10, the other two were video-taped case studies, . The video-taped case studies, Case #11 and #12 were summarized into written format. The student was asked to read through the case studies in the researcher's presence and the following question was asked for all three cases.

- If you were [the manager in the case study], what would you do in this situation?

The following questions were asked after all three cases were discussed in the interview.

- If a situation like this happened to you, where someone pressured you to do something that you know is not right/unacceptable/unethical, what would you do?
- What would your decision be if the person pressuring you to do something you think is not right/unacceptable/unethical is in the same position as you?
- What if the person is in a higher position than you?
- If your job is on the line, how will you approach the situation?
- Do you think these cases are similar or totally different? Why/why not?
- Will there be degrees of difference in making ethical decisions? Please explain.

During the first interview, some of the students said they wished more students in the class would get involved in the case discussions.

- As a student, how should we improve this situation?

Some students also wished that the instructor did not ask so many questions and did not pressure them to answer the questions.

- Please comment on this.
- Do you think the class interaction could go on without the instructor asking questions? Why/why not?

Some students said that this student group is quite opinionated.

- Would you comment on that?

Some students said they had the same ideas as those expressed by more outspoken students. They didn't want to repeat the ideas so they kept quiet in the case discussions.

- How should we improve this situation?
- How can the instructor find out whether the student who is not participating much in the case discussions has good ideas?

Additional questions were asked to clarify/validate/expand ideas expressed by the students in this interview as well as the previous interview.

<div align="center">Interview #3 with Students</div>

The student was asked about his/her group presentation. All students had completed their group case presentations before this interview.

- Please share your thoughts about your group case presentation.
- What were your experiences regarding preparation of the case, participation/contribution of your group members, and class interaction on the day of your group presentation?

In the previous interviews, some students wished that other students contributed more to the case discussions, and some wished the instructor did not ask so many questions.

- Now, after you have had your group case presentation, do you have the same feeling as these students? Why/why not?
- Compared to previous case discussions when the instructor was facilitating, what did you think of class interaction/participation on the day of your group case presentation?

You told me you used knowledge you learned from previous classes in making decisions for case discussions.

- Do you accept knowledge from the authority figure (the instructor)? Why/why not?
- Do you think the knowledge the instructor provides is true at all times? Why/why not?

You told me you would use the knowledge provided by the instructor as a guide only because it would not work in every situation.

- How will you keep up with the changes in rules, regulations, policies, and ethical issues in the hospitality industry?

In the demographic questionnaire you filled out in the first class session and in the first interview session, you described how you made decisions.

- Can you describe in an adjective or phrase what you think critical thinking is?
- Please give me an example of when you showed/demonstrated critical thinking in this class.
- May I know your reason for choosing this course instead of other courses?
- Did our audio recording using a video camcorder in the class and our presence in the classroom affect you in any way?
- Did they affect your participation in the discussion in any way?

Additional questions were asked to clarify/validate/expand ideas expressed by the students in this interview as well as in previous interviews.

Interview with Instructor in Two Sessions

An interview with the instructor was conducted during two sessions to accommodate the instructor's schedule. It was conducted after all individual interviews with the students were completed. The interview with the instructor was to gather information that could supplement the research findings obtained from the students. The following questions were asked during the interview sessions.

- Please share your thoughts about how the students responded to the case studies.
- What are your hopes and expectations for this course?
- Please share your thoughts on how this class has met or not met your expectations?

I know that you have been teaching this course for several years.

- Have you seen changes in the way students have participated in the class discussion over the years?
- What differences do you see in students' approaches in making decisions?
- Please comment on the arrangement of the classroom?
- How do you evaluate students' responses in the class discussions and written work?

APPENDIX C. DEMOGRAPHIC QUESTIONNAIRE

Code _____

Analysis of Thinking Skills Demonstrated by Students
in a College Classroom
Demographic Questionnaire

Please answer the following questions.

1. What is your age (under 20, 21-24, over 25)?

2. What is your marital status?

3. May we have access to your GPA (Yes, No)?

4. Are you currently employed (Yes, No)?
    If so, identify your current position.

    Type of institution   Position title   Hours/Week   Duration

5. Identify previous work experience since age 14 excluding current position identified above.

    <u>Type of institution</u>   <u>Position title</u>   <u>Hours/Week</u>   <u>Duration</u>

6. Describe the "best" boss for whom you have worked. What were the characteristics he/she had that you admired?

7. Identify memberships and positions held in out-of-class organizations (e.g. club, church group, student body) in which you have been involved during your college years?

    <u>Type of organization</u>   <u>Involvement</u>   <u>Number of years</u>

8.   What adjectives would you use to describe yourself to someone who does not know you? List **five** adjectives (e.g. kind, hot-tempered).

9.   Describe how you make decisions?

10.   Describe your career plans upon graduation.

Due on: August 28, 1995

APPENDIX D. HUMAN SUBJECTS REVIEW COMMITTEE APPROVAL

Information for Review of Research Involving Human Subjects
Iowa State University
(Please type and use the attached instructions for completing this form)

1. Title of Project __Analysis of Critical Thinking Activity Exhibited by Students in a__
__Senior Level College Classroom__

2. I agree to provide the proper surveillance of this project to insure that the rights and welfare of the human subjects are protected. I will report any adverse reactions to the committee. Additions to or changes in research procedures after the project has been approved will be submitted to the committee for review. I agree to request renewal of approval for any project continuing more than one year.

Tin Oo Thin	08/08/95	_Tin Oo Thin_
Typed Name of Principal Investigator	Date	Signature of Principal Investigator

Family & Consumer Sciences Education & Studies and	7W MacKay Hall	294-4636
Department	Campus Address	Campus Telephone

Hotel, Restaurant, & Institution Management

3. Signatures of other investigators   Date   Relationship to Principal Investigator

Frances Smith   08/08/95   Co-Major Professor

Nancy E. Brown   08/08/95   Co-Major Professor

4. Principal Investigator(s) (check all that apply)
   ☐ Faculty ☐ Staff ☒ Graduate Student ☐ Undergraduate Student

5. Project (check all that apply)
   ☐ Research ☒ Thesis or dissertation ☐ Class project ☐ Independent Study (490, 590, Honors project)

6. Number of subjects (complete all that apply)
   01 # Adults, non-students   10-15 # ISU student   ___ # minors under 14   ___ other (explain)
                                                     ___ # minors 14 - 17

7. Brief description of proposed research involving human subjects: (See Instructions, Item 7. Use an additional page if needed.)

    See attached.

(Please do not send research, thesis, or dissertation proposals.)

8. Informed Consent: ☒ Signed informed consent will be obtained. (Attach a copy of your form.)
   ☐ Modified informed consent will be obtained. (See instructions, item 8.)
   ☐ Not applicable to this project.
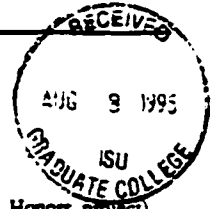
9. Confidentiality of Data: Describe below the methods to be used to ensure the confidentiality of data obtained. (See instructions, item 9.)

See attached.   ⎯ɔ̣ ɔ̣ʎ , ̣ʌ̣ɔ̣χ̣ɹ̣ ̣ɘ̣ǀ ̣ʌ̣ʌ̣ʟ̣ɢ̣ɔ̣ɔ̣ɔ̣̣

10. What risks or discomfort will be part of the study? Will subjects in the research be placed at risk or incur discomfort? Describe any risks to the subjects and precautions that will be taken to minimize them. (The concept of risk goes beyond physical risk and includes risks to subjects' dignity and self-respect as well as psychological or emotional risk. See instructions, item 10.)

    No risks are expected. The discomfort of being audio-taped will be overcome as students become familiar with classroom environment and as the class proceeds.

11. CHECK ALL of the following that apply to your research:
    ☐ A. Medical clearance necessary before subjects can participate
    ☐ B. Samples (Blood, tissue, etc.) from subjects
    ☐ C. Administration of substances (foods, drugs, etc.) to subjects
    ☐ D. Physical exercise or conditioning for subjects
    ☐ E. Deception of subjects
    ☐ F. Subjects under 14 years of age and/or   ☐ Subjects 14 - 17 years of age
    ☐ G. Subjects in institutions (nursing homes, prisons, etc.)
    ☐ H. Research must be approved by another institution or agency (Attach letters of approval)

If you checked any of the items in 11, please complete the following in the space below (include any attachments):

Items A - D   Describe the procedures and note the safety precautions being taken.

Item E   Describe how subjects will be deceived; justify the deception; indicate the debriefing procedure, including the timing and information to be presented to subjects.

Item F   For subjects under the age of 14, indicate how informed consent from parents or legally authorized representatives as well as from subjects will be obtained.

Items G & H   Specify the agency or institution that must approve the project. If subjects in any outside agency or institution are involved, approval must be obtained prior to beginning the research, and the letter of approval should be filed.

Last Name of Principal Investigator_____Tin Oo Thin_____

Checklist for Attachments and Time Schedule

The following are attached (please check):

12. ☐ Letter or written statement to subjects indicating clearly:
    a) purpose of the research
    b) the use of any identifier codes (names. #'s), how they will be used, and when they will be removed (see Item 17)
    c) an estimate of time needed for participation in the research and the place
    d) if applicable, location of the research activity
    e) how you will ensure confidentiality
    f) in a longitudinal study, note when and how you will contact subjects later
    g) participation is voluntary; nonparticipation will not affect evaluations of the subject

13. ☒ Consent form (if applicable)

14. ☐ Letter of approval for research from cooperating organizations or institutions (if applicable)

15. ☒ Data-gathering instruments

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16. Anticipated dates for contact with subjects:

First Contact	Last Contact
08/21/95	12/15/95
Month / Day / Year	Month / Day / Year

17. If applicable: anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual tapes will be erased:

    12/31/97
    Month / Day / Year

18. Signature of Departmental Executive Officer   Date   Department or Administrative Unit

    Thomas Limbol   *8-1-95*   *HRIM Dept*

19. Decision of the University Human Subjects Review Committee:

  ___ Project Approved   ___ Project Not Approved   ___ No Action Required

Patricia M. Keith
Name of Committee Chairperson   Date   Signature of Committee Chairperson

GC:1/90

APPENDIX E. CONSENT FORM

Dissertation Research
Analysis of Thinking Skills Demonstrated by Students
in a College Classroom

Request for Permission

Your classroom will be the site of a research study. The purpose of the research in [this course] is to answer the question "What kinds of thinking skills do students in [this] classroom demonstrate in analyzing case studies?" Each class period will be audio-taped using a VHS camcorder. Copies of your written work also will be part of the research. The researchers, [names], will be participant-observers in the class.

If you agree to participate in the research, you may be asked to be interviewed outside of class. This may involve listening to the audio tape of a class period and answering questions to further comment and clarify the case discussion. With your permission, these interview sessions will be audio-taped.

The discomfort of being audio-taped will be overcome as you become familiar with the classroom environment and as the class proceeds.

All the information you furnish for this research will be anonymous and will **NOT** affect your grade. The instructor will have access to the taped and transcribed information, and the researcher will have access to your written work **ONLY** after final grades are issued. What you say in this class and possible subsequent interviews will be held in strictest confidence. Your comments and answers to the questionnaire will not be identified by name but will be assigned a code, the last four digits of your student ID number. Only the researcher will have access to the codes. The tapes will be erased after they have been processed and the research has been completed, no later than Fall, 1997.

Your participation in the interviews is completely voluntary. If you choose not to participate, there will be no negative consequences. You may discontinue participation at any time. Your participation will benefit future students who work with case studies.

Thank you very much. The time you will be giving to this research is appreciated.

I agree to participate in this research.

_____   _____

Participant Signature   Date

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