

ABSTRACT

HONEYCUTT, BARBI TART. Students' Perceptions and Experiences in a Learning Environment that Uses an Instructional Game as a Teaching Strategy. (Under the direction of Dr. Beth Wilson.)

The purpose of this study was to describe and interpret students' perceptions and experiences in a learning environment that included a game as a teaching and learning tool. Researchers indicate learning environments are powerful forces that influence students' perceptions and experiences of the educational process, yet few studies have analyzed college students' perceptions of the learning environment in higher education settings.

This qualitative study used hermeneutic phenomenology to understand how students experienced a learning environment that included an educational game as part of the course curriculum. This study occurred in an introductory level course in Parks, Recreation and Tourism Management at North Carolina State University, and the game designed for the course was called Leisureopoly. Thirty students agreed to share their insights and experiences about their perceptions of this type of learning environment. Using the students' written reflections, two peer observers' feedback, and a personal research journal, data were triangulated to serve as a mechanism for reducing bias and ensuring accuracy of the data.

Data were analyzed using ATLAS. Open, axial, and selective coding techniques were combined with van Manen's selective and detailed approaches for isolating themes in phenomenological studies. First, data were analyzed to reflect common themes in the students' perceptions and experiences of the overall classroom as a whole. The six themes that emerged were: (1) environment, (2) activity, (3) student characteristics, (4) knowledge, (5) instructor characteristics, and (6) structure. Then, all of the data specifically related to Leisureopoly were re-coded and analyzed to determine the influence of the game on the

learning environment. Twenty-nine of the students mentioned Leisureopoly in their reflections. Leisureopoly had an influence on the learning environment in four main ways: (1) community in the classroom, (2) the perception of time, (3) the idea of winning, and (4) attendance.

Students' Perceptions and Experiences in a Learning Environment that Uses an

Instructional Game as a Teaching Strategy

by

Barbi T. Honeycutt

A dissertation submitted to the Graduate Faculty of

North Carolina State University

In partial fulfillment of the
Requirements for the degree of
Doctor of Philosophy

In

Parks, Recreation and Tourism Management

Raleigh, NC

2005

Approved by:

Chair of Advisory Committee

BIOGRAPHY

Barbi Honeycutt was born in Raleigh, North Carolina, on January 5, 1976. She received her Bachelor's and Master's degrees from the Department of Parks, Recreation and Tourism Management at North Carolina State University. During her studies at NC State, she worked for the Faculty Center for Teaching and Learning and as a teaching assistant in the Department of Parks, Recreation and Tourism Management. During her graduate education, she became interested in studying the teaching and learning process in higher education. When she enrolled in the doctoral program at NC State, she focused her studies on higher education and minored in Adult and Community College in the College of Education. Her coursework and teaching experiences inspired her to create innovative teaching and learning activities, one of which served as the basis for this dissertation.

ACKNOWLEDGEMENTS

First, I would like to say “thank you” to my husband and to my parents. This has been a long process of self-discipline and self-discovery, and you have been with me every step of the way. You have all made sacrifices so I could reach my goal. I owe you one.

I also want to take the opportunity to thank all of my committee members for their hard work, guidance, inspiration, and support. Dr. Beth Wilson provided endless amounts of patience and support as I tried to narrow my focus and find a manageable dissertation topic. Dr. Larry Gustke helped me clarify my research agenda and offered words of wisdom through the ups and downs of this whole process. Dr. Doug Wellman offered great advice, contacts, and moral support as I struggled to figure out how to tread down this path called the “scholarship of teaching.” I owe a very special thank you to Dr. Marilee Bresciani for being extremely supportive. Not many people would be willing to travel between Texas and North Carolina just for a graduate student. Dr. Edwin Lindsay shared much of his time and energy in helping me understand how to think about new innovations in the classroom. And finally, thanks to Dr. Karla Henderson (my “honorary committee member”) for helping me make sense of the world of qualitative research.

A special thanks to Annette Moore and Jerusha Bloyer for taking time out of their busy lives to serve as my peer observers for this research project. And thank you to all of my fellow graduate students for the much needed support, humor, and friendship.

I could not have completed my dissertation without the support of all of these exceptional individuals. The entire faculty and staff in the Department of Parks, Recreation and Tourism Management offered support and guidance throughout this whole process. I am honored to have worked with such a wonderful group of mentors, advisors, and friends.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER 1: INTRODUCTION AND PROBLEM STATEMENT	1
Educational Games	2
Rationale for Research Project.....	3
Background for Leisureopoly	4
Learning Outcomes for Leisureopoly	5
Research Framework	6
Bracketing the Researchers' Assumptions.....	6
Teaching Philosophy.....	7
Concluding Thoughts.....	9
CHAPTER 2: LITERATURE REVIEW	11
Teaching and Learning in Higher Education	11
Experiential Education.....	12
Educational Games	13
Rogers' Experiential Learning Theory	15
Educational Games and Rogers' Theory	19
Classroom Learning Environment Research	20
Moos' Conceptual Framework for Evaluating Educational Environments	24
Conducting Classroom Environment Research: A Brief Description of Quantitative and Qualitative Techniques.....	26
Quantitative Research Approach: CUCEI	27
Qualitative Research Approach	30
Theoretical Framework: Phenomenology.....	32
Phenomenology: Collecting Data and Writing the Results	35
Educational Games and the Classroom Learning Environment	37
Benefits of Educational Games.....	39
Challenges of Educational Games	42
Challenges of Game Research	44
Debriefing	46
Educational Games in Parks, Recreation and Tourism Management.....	51
CHAPTER 3: METHODS.....	53
Research Questions.....	54
Description of Participants and Setting.....	54

Hermeneutic Phenomenology	55
Trustworthiness: Validity, Reliability and Objectivity	57
Background Information and Description of Leisureopoly	59
Leisureopoly, Version I (Summer, 2003)	60
Leisureopoly, Version II (Fall, 2003)	63
Leisureopoly, Version III (Summer, 2004).....	64
Leisureopoly, Version, IV (Fall, 2004).....	65
Leisureopoly, Version V (Spring, 2005).....	68
Data Collection	70
CHAPTER 4: FINDINGS AND INTERPRETATIONS.....	73
Description of Participants.....	73
Analysis of Codes and Themes.....	74
Findings Section I: Analysis of Major Themes	76
Analysis of Theme #1: Environment	76
Analysis of Theme #2: Activity.....	80
Analysis of Theme #3: Student Characteristics	84
Analysis of Theme #4: Knowledge.....	87
Analysis of Theme #5: Instructor Characteristics.....	90
Analysis of Theme #6: Structure	93
Findings Section II: Analysis of the Leisureopoly Game	97
Introducing Leisureopoly.....	97
Playing Leisureopoly	100
After Leisureopoly	106
Findings Section III: Analysis of Themes Related to Research Questions	109
Analysis of Research Question #1	109
Analysis of Research Question #2	111
Analysis of Research Question #3	114
Community in the Classroom	115
The Perception of Time	116
The Idea of Winning	117
Leisureopoly's Influence on Attendance	119
Findings Section IV: Final Reflections on the Learning Environment.....	120
A Student-Centered, Supportive, and Interactive	
Learning Environment	121
Section V: Limitations	124
CHAPTER 5: DISCUSSION, IMPLICATIONS, AND FUTURE RESEARCH	126
The Meanings of Students' Experiences.....	126

Implications.....	128
Implications for Introductory Courses.....	129
Implications for Assessment.....	130
Implications for Learning Environment Research.....	131
Implications for Educational Games.....	132
Implications for Higher Education.....	132
Recommendations for Leisureopoly.....	133
Future Research.....	135
Final Thoughts.....	137
REFERENCES.....	143
APPENDICES.....	153

LIST OF TABLES

Table 1: Explanation of the Psychosocial Dimensions Measured in the CUCEL.....	29
--	----

LIST OF FIGURES

Figure 1: A Model of the Determinants of Classroom Climate.....	26
---	----

CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

Much emphasis has been placed on the quality and effectiveness of undergraduate education at research universities. In particular, introductory courses are receiving more attention since these courses provide the foundations for student performance throughout college and on the job. Research indicates the most critical and influential time for students' development is during their first year in college (Komives, Woodard and Associates, 2003). Introductory courses "set the stage" for what is to be expected as students matriculate through the curriculum. As a result, researchers are beginning to focus on elements of introductory courses and how such courses can be improved to enhance student development and learning in the college classroom. This is evident in the creation of first-year inquiry programs and first-year college programs where the intent is to involve students in critical thinking, reflection, and application of the course content to real world problems.

Although students in introductory undergraduate classes may be interested in the subject, they may not be engaged with the material or the environment. Freshmen come to college with over twelve years of experience as students, and they expect their college studies will simply be the last rite of passage before they move on with their lives (Leamson, 1999). Traditional-aged college students often view the college classroom as an extension of their high school experiences where the teacher is the "expert" and the student's role is to passively learn (Evans, Forney & Guido-DeBrito, 1998; Leamson, 1999). As a result of these experiences, some students come to college without an understanding of their role in the learning process in the college environment. Many are afraid to take responsibility for their learning because they did not have the opportunity in their previous

educational experiences. Students either do not know how, or simply do not care, to make connections with their life experiences in ways that are meaningful to their education.

Introductory courses present educators with the unique opportunity to capture students' attention and interest during a time when they can be most influenced and before they have time to develop poor study habits in college. Introductory courses can be designed with innovative teaching and learning approaches where students are motivated and inspired to take responsibility for their learning.

Educational Games

In the 1960's, researchers began exploring the use of games in military and government settings. Games soon attracted the attention of leaders in education who saw the value of experiential education approaches in enhancing student motivation and understanding in educational settings. During the 1980's, more researchers explored and analyzed the use of games in the classroom. Games have the power to transform the learning environment. Elements of cooperative learning, competition, excitement, curiosity, and creativity can be embedded into one gaming experience to produce a learning environment different from those to which most students are accustomed.

Students in college and know how to play school (Leamson, 1999). They know their role is to listen, take notes, and repeat the information on a test. They are unsure of environments that challenge this notion and require them to think critically, apply a theory, analyze a concept, or reflect on an experience. This type of learning breaks the traditional rules of playing school, yet some students seem to thrive in this type of learning environment. However, little, if any, research adequately supports or denies the use of games as a teaching strategy, or how the inclusion of games changes the learning environment.

Most research makes anecdotal connections to using games in the classroom, and there is no evidence to suggest games have a direct impact on students' learning any more than a traditionally taught, lecture-based course.

Rationale for Research Project

Gaming research is in need of a conceptual framework to support the use of instructional games in the classroom. Qualitative research methodologies can enrich the evidence gained from using games in a learning environment. Studies do not exist where an instructional game has been systematically treated as the variable from which to measure the changes that occur in a classroom. More studies need to be designed to understand the perceptions and experiences of the participants involved in a game in a classroom environment.

The potential match between instructional gaming and classroom environment research, combined with the theoretical foundation of Rogers' experiential learning theory and Moos' conceptual framework, provide powerful perspectives from which to view how games impact students' experiences in and perceptions of the classroom learning environment. The potential for identifying critical characteristics of learning environments that instructors should consider when becoming designers of learning experiences may be enhanced by using qualitative research techniques. A qualitative research design is a good way to examine how learning environments change and how students experience a particular teaching technique.

The study of parks, recreation, and tourism management lends itself to practical, hands-on, interactive application of course concepts, as can be demonstrated through the design and implementation of a simulation game. Educators in this field use innovative

teaching and learning methods, but few design systematic studies for publication. This is an area in the profession that needs further exploration. Research on instructional games in parks, recreation, and tourism management has been limited to environmental awareness and natural resource management issues. No research has been conducted on the use of instructional games as a teaching strategy in parks, recreation, and tourism management education. No research has been conducted on how the learning environment changes as a result of educational games in the classroom and how these environments influence student learning and development. Finally, no research has been conducted on the interpretation of students' experiences in an introductory parks and recreation course.

Background for Leisureopoly

In the Introduction to Parks, Recreation and Tourism Management (PRTM) course at North Carolina State University, students are introduced to fundamental definitions, theories, historical concepts, and current issues related to leisure and recreation in our society. As with most introductory courses, students are curious about the major and the profession. Towards the end of the course, I emphasize the leisure service system and how to distinguish between the many types of leisure service organizations. Students indicate this is the determining factor in helping them decide whether or not to major in PRTM and which areas they are most interested in. As a result of their feedback, I emphasize this section of the course.

During the summer of 2003, I taught the introductory course for the first time. As a doctoral student, it was a new experience for me to revisit the undergraduate classroom. I had taken this same course in this same classroom seven years ago, and now it was my turn to be the teacher. I tried unsuccessfully to get students to read and discuss the material

during class. Then, I began to rethink the way I presented the material. After brainstorming with a fellow graduate student and reflecting on my own undergraduate experience, I designed an instructional frame game called Leisureopoly (Appendix A). It is loosely based on the popular Monopoly© board game (Honeycutt, 2004).

Learning Outcomes for Leisureopoly

There are numerous learning outcomes for this type of game, depending on the specific topics covered in the course. Here are a few examples of the outcomes I created for this version of the game:

1. Students recognize the differences in leisure service organizations.
2. Students are able to create a mission statement for their agency.
3. Students use the mission statement to guide the decision-making process of developing their leisure service agency.
4. Students apply the coursework to their specific agency, giving them a realistic perspective of how theories, concepts, and ideas are used outside of the classroom.
5. Students experience the internal and external pressures of managing a leisure service organization.
6. Students compete for resources, just as leisure service organizations compete for resources.
7. Students use budgeting and accounting skills to manage financial resources.
8. Students meet and interact with other students in the class.

Throughout the process of playing the game, numerous “teachable moments” emerge, and the whole idea of a game in the classroom has piqued students’ curiosity encouraging them to learn more about the type of agency they represent so they can “win” the game.

Several researchers have commented that educational games based on Monopoly© have negative outcomes in the classroom because of the competitiveness involved in the activity (Gredler, 1992; Greenblat, 1981; Stolovitch, 1980). However, by designing the game around learning outcomes, competition can become a positive element in the classroom environment. Students are a reflection of our society, and they are competitive by nature. An instructor can design a game to use competition in a way that can enhance students' motivation. A game designed to adhere to educational outcomes can result in an experience that provides a positive and unique opportunity for students to become increasingly involved in the classroom and show increased responsibility for their learning.

Research Framework

This study gave me the opportunity to describe and interpret students' experiences in an introductory course that uses a game for teaching and learning. Through systematic analysis and reflection, I have explained how the inclusion of Leisureopoly in an introductory course influences students' learning and their perceptions of the classroom environment. This study was based on the core assumptions of phenomenology, which positions the researcher within the research. Through this process, I have been able to strategically analyze my position and role in the classroom.

Bracketing the Researcher's Assumptions

The qualitative research paradigm embraces the perspectives and experiences of the researcher. One of the fundamental techniques in phenomenological studies is positioning the researcher in the data through a process called reduction, or bracketing. The purpose of this section of chapter one is to put forth my assumptions, experiences, and expectations of teaching and learning in higher education.

I chose to use PRT 152 as the setting for this study because I enjoy teaching this introductory course. I have dedicated several years of time and energy learning to create a classroom environment that inspires and encourages students to become active, self-directed learners. What began as a review game for the final exam in PRT 152 grew into my dissertation topic and has laid the framework for future research. The idea of exploring the impact of the learning environment originated from my teaching philosophy.

Teaching Philosophy

As an instructor in the classroom, I want my role to be to guide and facilitate. I prefer to uncover the path of learning that is not predetermined by some standard set of rigid requirements. However, recognizing that a facilitator's role is to guide the learning process, there is need for some structure and control to insure the overall goals of the class are being met. There should be balance so the structure does not override the surprise of what might be learned from open discussions. In addition, I want my perspective on teaching to be learner focused, or as defined by Pratt (1998), the "developmental perspective", where the students are the driving forces behind the class, not the material. At this point in my teaching career, I am trying to work towards that goal.

Through the teaching opportunities I have had, it has become quite clear that students learn best when the material relates to them on some level. Cantor (1992) reinforces the concept of recognizing the value of the learners' experiences. Those who work with college students should find ways to incorporate the learners' experiences and prior knowledge into the classroom. Allowing college students opportunities to relate their past experiences can also aid in motivating the college student to begin internalizing the material thereby enhancing the learning process and application of new knowledge. Though Cantor (1992)

warns motivations can become barriers to learning, he simply encourages the educator to “increase the motivators and decrease the barriers” (p. 39). How is this done? I think this is done by understanding who your students are and why they are here to begin with.

From what I have experienced, there is no “typical” college student. Every aspect of college students’ lives varies from one individual to another. Their backgrounds, language, heritage, prior knowledge, age, level of commitment, motivation, willingness to learn, willingness to try, personal interests, and professional interests separate one student from another. What they have in common is that they all are likely to be in my class—at the same time. College students have numerous responsibilities outside of the classroom, and creating a learning environment conducive to their lifestyles can be a challenging task for the instructor.

For many college students, practical hands-on learning experiences related to the “real world” motivates learning and gives them a reason to associate the new knowledge with their prior experiences (Cantor, 1992). Students enrolled in the parks, recreation and tourism management curriculum need this type of practical “real world” application in the classroom. The field lends itself nicely to the fusion between theory and practice, and most professionals within the industry are eager to share their knowledge with students. As I become more comfortable with my position as an instructor and with the subject matter, I want to direct classes in a variety of ways. I want to continue to experiment with role-playing, case studies, games, simulations, panel discussions, problem-based learning, and other methods of teaching so I can understand what methods enhance my teaching style while complementing my students’ learning styles.

Research indicates that college students have a variety of reasons for learning. Some are at the university to get a degree solely for the purpose of finding a job. Others are here to avoid the workforce. Some are here to learn as much as they can about any given subject matter, just as long as they are learning something new. As instructors, we cannot control all of the forces that motivate people to learn, but we can create an environment that is supportive and encouraging for all learners. Students need to feel a sense of safety in order to contribute their opinions and ideas to a group of strangers. They need to know their contributions in the classroom will be taken into consideration and treated with respect.

I constantly look for ways to create this sense of community in the classes I teach. I always enjoy finding creative ways to express an idea, and the satisfaction I feel when a student understands the concept is the best reward I know. The relationships I build with my students are more important to me than how much of the subject we cover. Since I became a student at North Carolina State University, the professors in the Parks, Recreation, and Tourism Management department have welcomed me with open arms. They believe in me, encourage me, and have seen the possibilities even I have not quite figured out yet. This type of environment is what makes learning possible, and this is the type of environment I want to continue to be a part of, both as a student and as an instructor.

Concluding Thoughts

My experience creating and developing Leisureopoly has changed the way I look at the teaching and learning environment in my classes. This game works with my teaching style and personality, and it also keeps the course material fresh and new. I have been studying leisure and recreation for the past nine years, and it is exciting to see a new group of students understand a theory or idea in a different way than I had anticipated.

When I created the game, I had no idea it would generate as much interest as it has. Former students see me in the hallway and they still remember playing Leisureopoly in their PRT 152 course. I did not realize the importance learning environments until I started studying the literature more in depth. This area of research led me to create a whole new perspective on how I view the teaching and learning process in higher education. The next chapter reviews some of this literature and provides a foundation from which to think about the impact of the learning environment in introductory college classrooms.

CHAPTER 2

LITERATURE REVIEW

The purpose of chapter two is to provide an in-depth review of the literature related to teaching and learning in higher education. This chapter balances the historical foundations with current issues related to teaching and learning in the introductory college classroom.

Teaching and Learning in Higher Education

Much research has been conducted on teaching and learning in the college classroom (Angelo & Cross, 1993; Bonwell and Eison, 1991; Boyer, 1997; Evans, Forney & Guido-DeBrito, 1998; Jensen, 1995; Lazerson, Wagener & Shumanis, 2000). Across disciplines, college teachers are becoming increasingly aware of how students learn, what motivates them to achieve, and what pedagogical approaches help students make connections between the material and their experiences (Meyers and Jones, 1993; Bonwell and Eison, 1991; Greer, 1977). Numerous studies have emerged on topics such as learning styles and teaching methods which demonstrates the dedication many instructors have to enhancing teaching and learning in the college classroom (Angelo & Cross, 1993; Bonwell and Eison, 1991; Jensen, 1995).

Educators recognize the need for continuous experimentation, assessment and revision. Instructors engage in research every day in college classrooms when they try new teaching strategies for the purpose of enhancing learning. However, educators still struggle with what it means to actually “learn” something. Continued improvement is needed in assessing the teaching and learning process in undergraduate education. To do this effectively, educators must rethink what it means to “teach” by revisiting the traditional models of higher education to improve students’ learning. In an article entitled “The Case

Against Teaching”, Spence (2001) declared, “We won’t meet the needs for more and better higher education until professors become designers of learning experiences and not teachers” (p. 12).

Learning is defined as both a product and as a process. Behaviorists and psychologists view learning as a change in behavior resulting from an experience, which results in new knowledge (Leamson, 1999). Change in behavior can be observed or measured to illustrate that learning has indeed occurred. However, some processes, such as conditioning or habitual repetition, result in behavioral changes, but not necessarily as the result of an experience that generated or was predicated on new knowledge (Milhollan & Forisha, 1972). Additionally, we should be question whether or not learning has occurred when the change in behavior is not actually demonstrated or performed. Some researchers argue that learning can occur in the way an individual thinks about an idea, even if he or she has not had the opportunity to demonstrate the new knowledge. Many theorists focus on the individual *processes* in which people make sense of information, integrate and possibly generate new knowledge from an experience (Milhollan & Forisha, 1972; Rogers, 1969). Placing emphasis on the process rather than the product presents opportunities for viewing learning from a developmental perspective, emphasizing positive growth and change resulting from experiences and reflection.

Experiential Education

One approach to enhancing the teaching and learning process in the classroom is experiential education. Experiential education is a form of active learning that can take on many forms, from role-playing to small group discussions to intricately designed simulations. These activities are designed to engage the learner in the experience, but more importantly,

efforts must be made to reflect on the connections between the learning objectives and the experience itself. Experiential learning can occur outside of the classroom; however, in this study, I emphasize experiential learning activities specifically in terms of the classroom setting.

Experiential education has its place in higher education, where students come to the college classroom with vast amounts of experiences and beliefs that offer rich opportunities for discussion and experimentation. Meyers and Jones (1993) explained, “Students, no matter what their age, need opportunities to engage in activities—with teachers, fellow students, and materials—that help them create their own mental structures and test them, thus making better sense of the world around them” (p. 20). Experiential education changes the traditional learning environment and places the students and their experiences in the center of the learning process.

Educational Games

One form of experiential learning is the use of instructional games, which have been adopted and widely used in military, business, urban planning, health studies, and K-12 settings (Greenblat & Duke, 1981; Dempsey, Haynes, Lucassen & Casey, 2002; Squire, 2002; Thatcher, 1986). Games have been used in education since the 1960’s, and although there are skeptics, the use of well-designed educational games is becoming increasingly popular (Anderson, 1998; Greenblat & Duke, 1981; Dempsey, et al, 2002; Squire, 2002; Oblinger, 2003). With the creation of professional journals in simulation, gaming and experiential education, and the increased research activity in assessing games as instructional mediums, more researchers, teachers, and trainers are recognizing the legitimacy and benefits of using games in the classroom.

Before intensive study of educational games occurs, there should be a general understanding about how games are defined and classified. Terminology related to educational games is used interchangeably throughout the literature, resulting in confusion when assessing the impacts of such a strategy on the teaching and learning process (Greenblat & Duke, 1981). Descriptive terms such as “simulation games”, “game-simulations”, “gaming simulations”, “gaming”, “games with simulated environments”, “instructional games” and “educational games” present much confusion for those studying games as educational tools (Greenblat & Duke, 1981).

Simulations are designed to be representative of an actual social system that exists outside of the classroom, complete with realistic goals, objectives, resources, and consequences (Greenblat & Duke, 1981). Games, however, are interactive environments, either realistic or contrived, where there is competition, rules, rewards and a specific outcome (Anderson, 1998; Dempsey, Haynes, Lucassen & Casey, 2002; Greenblat & Duke, 1981). Some games may be intellectually challenging, but they are not designed to teach or enhance learning in the educational setting (Greenblat & Duke, 1981). Other games are educationally beneficial, but they may not be designed to replicate a “real world” social system outside of the classroom. The most important aspect of effective educational games is that they must correspond with the learning outcomes of the course and have meaningful learning objectives, either embedded throughout the playing of the game or addressed during post-game reflection (Anderson, 1998; Dempsey, Haynes, Lucassen, & Casey, 2002).

One type of educational gaming strategy that is effective for the classroom is the use of “frame games”. Frame games are games that are popularly familiar (such as Jeopardy© and Monopoly©) but are manipulated to specifically cover the content of a particular course

(Greenblat, 1988; Stolovitch, 1980; Thiagarajan and Stolovitch, 1980). Thiagarajan and Stolovitch (1980) explain, “[Frame games] are those games that are deliberately developed to provide a content-free instructional structure on which can be loaded locally relevant content” (p. 98). Frame games have numerous educational benefits. They help students generate awareness about current issues, discover new insights, learn basic facts (lower-level thinking skills), and apply higher order thinking skills such as integration, synthesis, and problem-solving (p. 104). Additionally, frame games are less time consuming to design because the basic structure of the game already exists. The key is to appropriately alter the subject area and rules of play to coincide with the intended course goals and objectives.

Rogers’ Experiential Learning Theory

Carl Rogers is best known for his concept of the person-centered approach to therapy, which led to his application of a new perspective in education appropriately recognized as “student-centered learning” (Kirschenbaum, 1979; Rogers, 1969; Thorne, 1992). Rogers conceptualized his student-centered approach as one where the teacher is no longer viewed as the “expert” and students become the central focus instead. Given favorable conditions and supportive environments, Rogers believed all humans are inherently capable of obtaining some level of self-actualization (Thorne, 1992). Although his concept of self-actualization is not new, Rogers is highly regarded in education for the application of his approach to student-centered learning environments.

Rogers viewed learning on a continuum ranging from cognitive (meaningless) to experiential (significant). Cognitive learning includes academic knowledge such as memorizing multiplication tables or spelling words. Experiential learning refers to activities that are applied and lead to some type of personal growth or change (Rogers, 1969;

Kirschenbaum, 1979). In experiential learning, there are four qualities which facilitate and enhance the learning process. It (a) requires the learners' personal involvement; (b) is based upon direct practical, social, personal or research problems that relate to the learners; (c) is self-evaluated by the learners; and (d) has pervasive effects on the learners (Rogers, 1969). Rogers referred to traditional, rigid approaches to education as "self-defeating systems" that prescribe too many limitations and restrictions, resulting in loss of creativity and curiosity that ultimately affects students' learning and development (Rogers, 1969). However, through experiential learning approaches, education moves from relying too heavily on the cognitive aspects of student learning to the more significant types of learning as determined by the students' own interests and curiosities (Rogers, 1969).

In experiential education, the role of the teacher is not to present all the facts, but to facilitate learning by enhancing interpersonal relationships through a supportive learning environment. Rogers (1969) suggested five strategies for facilitating learning: (a) Create a positive climate for learning, (b) clarify the purposes of the learners, (c) organize and present learning resources, (d) balance the intellectual and emotional aspects of learning, and (e) share feelings and thoughts with learners, but not dominate the conversation or learning process. This type of climate encourages interpersonal relationships, and students become increasingly self-directed in their approach to learning (Rogers, 1969; Sprinthall, 1987).

Rogers (1969) believed that humans are basically trustworthy individuals who depend on relationships and social interactions. He thought our lives move from dependence to independence, and our natural tendency is to move towards some higher level of development (Kirschenbaum, 1979; Rogers, 1969). Relationships permeate every aspect of society, helping us learn what is expected, how to interact with others and how to exist as

social beings within the world. In educational settings, these psychological and social relationships influence the teaching and learning process, and it is through these social interactions that students realize their potential (Rogers, 1969; Kirschenbaum, 1979; Sprinthall, 1987). Rogers (1969) stated, "The facilitation of significant learning rests upon certain attitudinal qualities which exist in the personal *relationship* between the facilitator and the learner" (p. 106). In any educational setting, personalities, emotions and reactions can enhance or hinder the learning environment, resulting in positive or negative learning experiences.

Rogers built on John Dewey's philosophy of education, where experience, engagement and reflection significantly influence one's learning, and the learning environment has a direct impact on students' academic success (Kirschenbaum, 1979; Smith, 2001). According to Sprinthall (1987), "Studies have shown that nonsupportive, critical, and negative classroom 'climates' have adverse physiological and psychological effects on the pupils" (p. 301). However, Sprinthall (1987) argued that it could not be concluded that learning is exclusively related to Rogers' principles. Learning is individualized. It can and does occur on some level under the worst possible conditions and in other situations that are not considered experiential or self-directed.

Rogers placed emphasis on the development of the whole person, addressing both the individual's cognitive and affective needs. Rogers (1969) argued that the goal of education is the emergence of a "fully-functioning person" categorized by "an individual who has experienced optimal psychological growth" existing within the freedoms of his or her own feelings, emotions, thoughts and being (p. 295). Thorne (1992) described this as a person whose most prominent characteristic is an "increasing openness to experience...[who is] able

to listen to themselves and to others and to allow themselves to experience what is happening without feeling threatened” (p. 34). Students at this level should be able to acknowledge their feelings, emotions, and everyday experiences as being relevant and integral to their learning (Millholan & Forisha, 1972). Experiential education helps them make the connections between the relevance of their own experiences, the experiences and attitudes of others, and how the process contributes to their own learning.

Rogers (1969) mentioned throughout his research that our society is one of continual change. He believed the goal of our educational system should be to produce social beings who are in the midst of their own change and development. Students should have the abilities to formulate their own questions and make contributions towards improving and enhancing society (Rogers, 1969). The process of *teaching* alone does not do this. In experiential education, Rogers visualized the need to shift from simply “teaching” students to facilitating their learning, growth and development in more meaningful ways.

Rogers believed humans reconstruct their self-concepts to make sense of the world around them (Thorne, 1992). The ability to adjust to the demands of social expectations or environmental changes is important to exist in society, and educational settings have their own demands as well. Each instructor, each classroom, and each experience presents new challenges to the students, and the well-adjusted, knowledgeable students can succeed and learn in any environment. However, Rogers maintained that an experiential, supportive, challenging and compassionate learning environment will lead to enhanced student achievement where students feel they can take a risk and explore their interests within their own realms of reality (Rogers, 1969; Thorne, 1992).

Given the influence of positive learning environments, Rogers challenged educators to move from focusing on teaching to focusing on the *facilitation* of learning. The goal should be to guide students and help them realize their own potential. If education is to be viewed as a developmental process, where positive growth and change occurs as the result of learning, then educators must recognize that students' levels of development may interfere with experiential education. Students may not be developmentally capable of taking responsibility for their learning in ways that are meaningful (Sprinthall, 1987; Thorne, 1992). It is the educator's responsibility to facilitate this development process by establishing a sense of community through social and interpersonal relationships to create favorable conditions from which learning can occur (Rogers, 1969).

Educational Games and Rogers' Theory

Rogers' concepts are often referenced throughout education literature as fundamental approaches to thinking about the teaching and learning process; however, a review of the literature revealed only two articles where researchers specifically designed studies based on Rogers' theory. Utterback (1985) based her study on Rogers' theory in enhancing affective learning and analyzing group dynamics in secondary school students. Miller (2001) used Rogers' learning theory and person-centered approach in the development and analysis of web-based instruction.

Few studies have connected educational games with Rogers' theory of experiential education. Most studies cite Kolb and Dewey, with references to Piaget and Lewin (Anderson, 1998; Cullen, 1995; Dempsey, Haynes, Lucassen, & Casey, 2002; Petranek, 2000; Quay, 2003; Ruben, 1980; Thomson, 2000). Since Rogers was one of the founding theorists of student-centered learning within the larger scope of experiential education, his

perspectives on education provide support and explanation for the use of games as a teaching method to enhance students' learning. The use of educational games meets all four of Rogers' qualities for facilitating and enhancing the learning process in experiential education: (a) Games require the learners' personal involvement; (b) they can be based upon direct practical, social, personal or research problems that relate to the learners; (c) they allow students the opportunity to evaluate their own progress and success; and (d) they make lasting impressions on learners because games are unique, fun and challenging (Anderson, 1998; Greenblat & Duke, 1981; Squire, 2002; Thiagarajan and Stolovitch, 1980).

Experiential education, specifically games, reverses the traditional teaching and learning model where students passively receive information from the instructor and are then tested on their mastery of the material. With games, students are placed in the center of the issue where they must take action first, apply their knowledge, and then make generalizations to other contexts (Anderson, 1998; Greenblat & Duke, 1981). The fundamental concept of Rogers' theory of experiential education is this emphasis on the learner, and well-designed games begin with the students' own experiences, knowledge, and beliefs. When viewed in connection with educational games, Rogers' theory provides an interesting approach from which to plan, design, implement and reflect on the use of games and how the classroom environment changes when games are introduced into the classroom.

Classroom Learning Environment Research

Rogers' emphasis on the importance of positive learning environments parallels the time when educational researchers began systematically studying the impacts of the environment on students' learning. Over the last forty years, extensive analysis and evaluation of the impacts of classroom environments have influenced the teaching and

learning process (Fraser, 1986; Fraser, 2002; Moos, 1979; Vahala, 1994; Walker, 2003).

Walker (2003) stated, “The learning environment has a strong influence on student outcomes and plays an important role in improving the effectiveness of learning from the level of the institution down to the level of the individual classroom” (p. 1). Instructors who seek to improve the effectiveness of teaching and learning should view the learning environment as a critical component of students’ overall educational experience (Fraser, 1986).

Learning environment research encompasses a broad range of disciplines, from the architectural design of institutions to the psychological and social climates that exist within individual classrooms (DeYoung, 1977; Fraser, 1986; Moos, 1979; Vahala & Winston, 1994). The majority of research on classroom environments has been conducted in elementary and secondary school settings (DeYoung, 1977; Fraser, 1986; Treagust and Fraser, 1986a & 1986b; Vahala & Winston, 1994). Prior to the late 1970’s, few studies attempted to analyze the impact of the learning environment in higher education classrooms. In these studies, researchers emphasized the quality of the instructor rather than the social, psychological and intellectual development of students (DeYoung, 1977).

Over the past twenty years, researchers have begun directing their focus towards the college classroom learning environment and its influence on students’ learning, social development, satisfaction and personal growth. Most researchers study students’ perceptions of psychosocial dimensions of the classroom environment based upon Moos’ conceptual framework (Fraser, 1986; Myint, 2001; Moos, 1979; Vahala & Winston, 1994; Walker, 2003). Fraser (2002) offered further explanation, “Classroom environment dimensions have been used as criterion variables in research aimed at identifying how the classroom environment varies with such factors as teacher personality, class size, grade level, subject

matter, the nature of the school-level environment and the type of school” (p. 13).

Researchers are interested in students’ perceptions and experiences within a classroom environment. By focusing on the students’ perceptions, the researcher is allowed to see the classroom environment “through the eyes of the participants, rather than through the eyes of an external observer” (Aldridge, Fraser, & Huang, 1999).

Classroom environment research has a varied and diverse history. Much of the research in this field has been conducted on the role of the learning environment in meeting student learning outcomes in the classroom, throughout the curriculum, and at the institutional level (Fraser, 1986; Fraser, 1998). Fraser (2002) stated, “The strongest tradition in past classroom environment research has involved investigation of associations between students’ cognitive and affective learning outcomes and their perceptions of psychosocial characteristics of their classrooms” (p. 8). Although Fraser (2002) studied the impacts of technology on learning environments, few studies have used classroom environment instruments to measure the impact of an educational innovation on students’ perceptions, satisfaction, and cognitive development (Fraser, 1998; Fraser 2002).

One of the most popular research designs in the past decade has been the comparison of students’ and instructors’ perceptions of their actual and preferred learning environments (Fraser, 1998). Some researchers focus on person-environment fit studies, which determines whether or not students perform more effectively in their preferred learning environments (Fraser, 1986; Fraser 1998). New research is also emerging on graduate level classroom learning environments (Myint & Goh, 2001; Nair & Fisher, 2001). And, with the increase in technology-based courses, research is just beginning on the impacts distance education and technology has on the learning environment (Logan, 2003; Walker, 2003).

Other researchers have taken a different approach by analyzing how classrooms differ between types of higher education institutions. Rather than focusing on one classroom, Vahala and Winston (1994) studied the differences in classrooms from a sample of research universities, liberal arts and community colleges. They found significant differences in students' perceptions of classroom environments based upon the type of institution and their academic disciplines.

The importance of students' perceptions cannot be overlooked. Research designs incorporating the perceptions of students from their point-of-view allows data to be collected that outside observers could miss. Students have experiences from many different classrooms making them accurate judges of the learning environment as it relates to them. Although an objective observer is valuable, analyzing students' perceptions and experiences within the learning environment is important. In learning environment research, these perspectives are referred to as *alpha press* and *beta press*. Alpha press is the learning environment as viewed by an outside observer. Beta press is the learning environment as viewed by the internal participants (Nair & Fisher, 2001). In a well-designed study, both perspectives should be taken into consideration to achieve a more accurate description of the learning environment (Nair & Fisher, 2001). Objective indexes are appropriate measures of the learning environment, but there is also a need to tell the whole story of students' experiences and provide supporting evidence that the instrument is accurately measuring students' perceptions.

Current research suggests multiple methods of assessment are needed in classroom environment research (Aldridge, Fraser & Huang, 1999; Fraser, 1998). There is a need for naturalistic, qualitative, case study techniques to complement the quantitative data obtained

from the quantitative instruments. According to Fraser (1986), future research is needed designing “experimental studies in which the environment is deliberately changed in specific ways in order to establish more clearly the causal effects of these changes on students’ outcomes” (p. 187). Research findings thus far indicate the need to continue focusing on the impacts of various types of learning environments in an effort to improve student learning outcomes (Fraser, 2002). Learning environment research remains vibrant and active within the education literature; however, much remains to be done in higher education settings. Future research is needed using multiple methods including experimental designs, qualitative and quantitative research designs, and the combination of external observers and student-perceived observations (Aldridge, Fraser, & Huang, 1999; Fraser, 1986; Fraser 2002).

Moos’ Conceptual Framework for Evaluating Educational Environments

One of the most widely recognized researchers in learning environment research is Rudolf Moos, a professor of Psychiatry at Stanford University (Dorman, 1992; Fraser, 1986). Moos’ research in educational environments is grounded in his earlier work on how psychosocial environments influence human behavior (Dorman, 2002; Moos, 1979). Moos studied a variety of human environments including hospitals, work environments, prisons, classrooms, and university residence halls to understand how these environments are designed, or could be designed, to influence human behavior (Dorman, 2002; Moos, 1979).

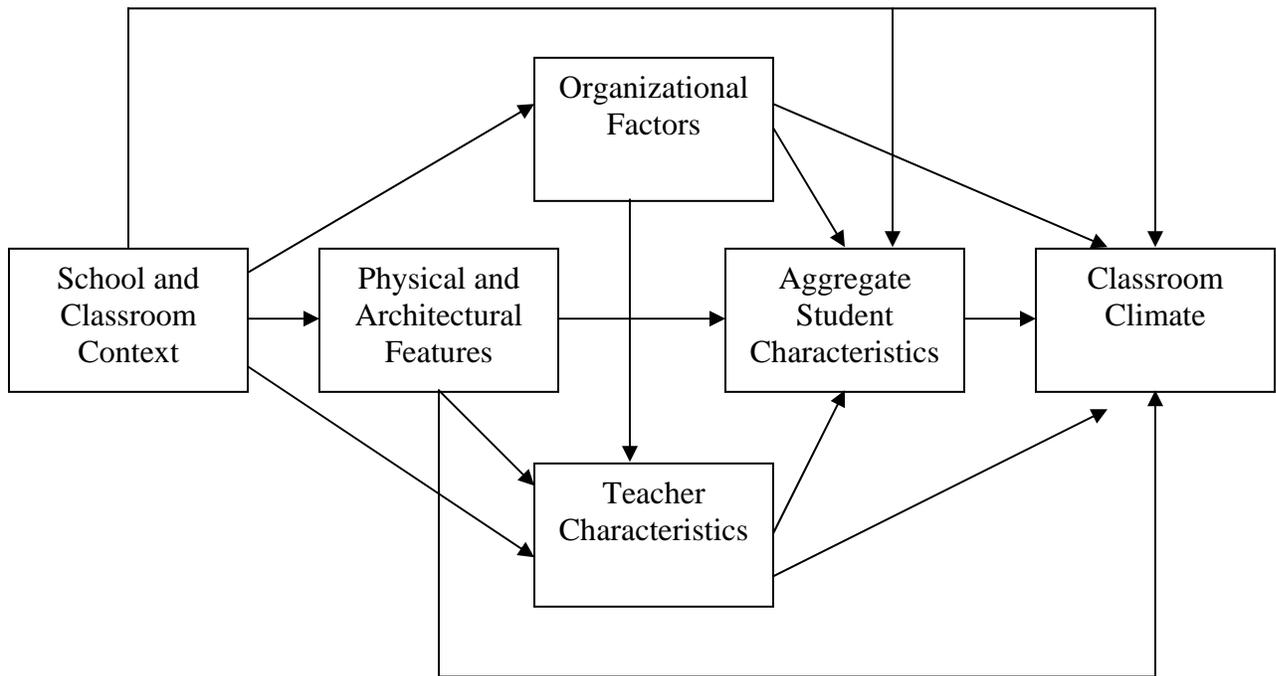
Although Moos’ (1979) research focuses on the social climate of classroom settings, he emphasizes that both the physical-environmental and social-environmental variables be considered together when assessing the learning environment. He states, “Architecture and physical design can influence psychological states and social behavior” (Moos, 1979, p. 6). He recognized the potential for educators to benefit from classroom environment research,

explaining that classrooms are social environments that have “personalities” of their own (Moos, 1979; Walker, 2003). Given the mixture of students’ personalities, instructors’ teaching styles and the numerous variables contained within a classroom, trying to conceptualize and systematically study such dynamic environments is a challenging task. Early researchers began to categorize elements of the learning environment in the hopes of creating a more systematic approach to capturing what makes a learning environment successful or unsuccessful.

Moos’ (1979) conceptual framework presents a systematic approach to studying learning environments. This framework is based upon two broad categories of systems present in any human environment: the Environmental System and the Personal System. The Environmental System includes the physical setting, organizational factors, human aggregate and social climate. The Personal System includes sociodemographics, expectations, personality, and coping skills. Learning environments can be analyzed from any one of these individual perspectives; however, Moos’ primary interest is the social climate present within the classroom and how that climate impacts students’ learning.

Moos (1979) measures social climate using three dimensions: Relationship Dimensions, Personal Growth Dimensions and System Maintenance Dimensions. According to Dorman (2002), “Few genuine learning environment researchers of the past 30 years have departed from this general framework for conceptualizing learning environments” (Dorman, 2002, pp. 112-140). Figure 1 illustrates Moos’ model of the determinants of classroom climate, demonstrating how complex the learning environment can be perceived (Moos, 1979, p. 161):

Figure 1: A Model of the Determinants of Classroom Climate
 (Reproduced with permission from R. Moos, 2005)



This model suggests there are numerous variables that can have an impact on the classroom environment. It should be understood that this model only shows the unidirectional flow of one variable to another, when in reality, the variables can relate be inter-related resulting in a much more complex system.

Conducting Classroom Learning Environment Research: A Brief Description of Quantitative and Qualitative Techniques

Learning environment research has traditionally been conducted using quantitative research methods (Fraser, 1986). Dozens of scales, inventories, and survey instruments have been created to assess the classroom learning environment; however, until the mid-1980's, all of them were designed to measure the environments in elementary and secondary settings. With the existence of so many classroom environment scales, more research was needed to

test and revise these instruments in a variety of institutions and classroom settings. In response to the need for more systematic research design in higher education settings, researchers began creating a variety of classroom environment scales designed to methodologically measure the learning environment in colleges and universities. Several different scales have emerged, including the Teaching and Learning Environment Questionnaire (TLEQ), the Inventory of University Classroom Environment (IUCE), the Preferred College Classroom Environment Scale (PCCES), the College Classroom Environment Scale (CCES), the What is Happening in This Class? Questionnaire (WIHIC) and the College and University Classroom Environment Inventory (CUCEI).

Quantitative Research Approach: The CUCEI

The CUCEI is the most widely used scale for assessing college classroom environments. Developed in 1986 by Treagust and Fraser, the College and University Classroom Environment Inventory (CUCEI) was the first scale designed to evaluate both the actual and preferred college classroom environments (Treagust & Fraser, 1986a & 1986b). The CUCEI was designed specifically for small college classrooms containing approximately thirty students or fewer. It originally contained 49 questions, with the same number of questions relating to each of the seven dimensions (Treagust & Fraser, 1986a & 1986b). Respondents recorded their level of agreement on a 4-point Likert scale format consisting of strongly agree, agree, disagree, or strongly disagree, and the scoring direction was reversed for half of the questions.

The original CUCEI was developed based on four main criteria. First, the researchers analyzed all the dimensions contained in existing instruments for secondary education settings. Second, the researchers designed questions based on the three dimensions in Moos'

conceptual framework: relationship, personal growth and systems maintenance. This led to the final version of the original CUCEI which contained seven psychosocial dimensions: Personalization, Involvement, Student Cohesiveness, Satisfaction, Task Orientation, Innovation, and Individualization. Third, college teachers and students were included in the initial development process through interviews and were asked to comment on early drafts of the instrument. Finally, researchers considered the overall economy of the instrument, ensuring a relatively small number of reliable scales and questions that could be answered in a timely manner (Treagust & Fraser, 1986a & 1986b).

The CUCEI stayed in its original form until 2001, when Nair and Fisher created a personalized form of the instrument in an effort to distinguish between students' personal experiences in a learning environment and their observations of it (Nair & Fisher, 2001). Two major changes occurred in the personalized form: a revision of the dimensions and an adjusted Likert scale. Only five of the original seven dimensions were used, and two new dimensions were added. The seven dimensions measured by the personalized form of the CUCEI are: Personalization, Cooperation, Student Cohesiveness, Equity, Task Orientation, Innovation, and Individualization (Nair & Fisher, 2001). Involvement and Satisfaction were replaced with Cooperation and Equity, which were not dimensions in the original form of the CUCEI. Each of these dimensions is explained in Table 1 below (Nair & Fisher, 2001; Treagust & Fraser, 1986a & 1986b):

Table 1: Explanation of the Psychosocial Dimensions Measured in the CUCEI

Dimension	Explanation
Personalization	Emphasis on students' interactions with the instructor; concern for students' personal welfare
Cooperation	Extent to which students work cooperatively with rather than competitively towards one another
Student Cohesiveness	Extent to which students know each other and are helpful and friendly towards one another
Equity	Extent to which students perceive they are treated equally by the instructor
Task Orientation	Extent to which class activities are clear and well organized
Innovation	Extent to which instructor plans new activities, uses a variety of teaching techniques and designs innovative assignments in class
Individualization	Extent to which students are allowed to make decisions; extent to which students are treated differently according to their own individual interests and abilities

Nair & Fisher (2001) conducted reliability and validity tests on the personalized form of the CUCEI. Researchers determined that each of the seven dimensions has acceptable levels of internal consistency using either the individual or the class mean as the unit of analysis.. Discriminant validity was measured for each of the seven dimensions to determine if all seven dimensions were actually needed in the instrument. Researchers determined that although there are overlapping features of a learning environment, there were enough differences between the dimensions to justify including all seven of them in the revised personalized form of the CUCEI (Nair & Fisher, 2001). The personalized version of the CUCEI was also tested to determine if it could differentiate between classrooms. Each dimension was significant at the $p < 0.01$ level between classrooms indicated that the personalized form of the CUCEI is capable of differentiating between classrooms (Nair & Fisher, 2001).

Although the CUCEI is not the most recent scale to measure the learning environment, it continues to be tested and validated in a variety of disciplines in college

classrooms around the world. One of the most recent trends in learning environment research is to measure how different groups within a setting perceive a learning environment. Logan (2003) used the CUCEI to measure how the computing learning environment differs for boys and girls. In this study, Logan (2003) found that students' perceptions of the computer learning environment vary based upon gender and the type of school. More importantly, Logan's research validated the CUCEI's capability to measure perceptions of sub-groups within a learning environment, opening the possibilities for more diverse experiments and research designs using the CUCEI.

New research continues to emerge using the CUCEI to measure the college learning environment, especially with the increase in online courses and new ideas of how a "learning environment" is defined. An extensive literature review uncovered a variety of settings, applications and opportunities for continued research using the CUCEI; however, no studies were found using CUCEI to measure the learning environment in a classroom that uses a game as a teaching and learning tool.

Qualitative Research Approach

Qualitative research offers a different perspective from which to analyze learning environments. The questions on the CUCEI were phrased to ask students their perceptions of, not necessarily their experience in, the actual classroom environment. To study students' experiences in a learning environment, qualitative research methods offer ways to gather richer, more detailed data.

Qualitative research is a collection of research strategies designed to describe an individual's, or group of individuals', experiences, interpretations and behaviors from their frame of reference (Bogdan & Bilken, 1998; Henderson, 1991). Qualitative research is

naturalistic, meaning it is collected in the field or setting, with careful consideration of the context within which the action is taking place. Data collected from qualitative approaches are rich and descriptive, and samples are usually smaller than those used for more traditional quantitative research designs.

Qualitative researchers are not concerned with testing a hypothesis or making predictions about a phenomenon. The goal is not to predict human behavior, but to promote social change through rigorous analysis, reflection, and in-depth meaning (Bogdan & Bilken, 1998). This type of research is categorized under the interpretive paradigm, which, according to Henderson (1991) assumes that “social reality is multiple, divergent, and interrelated” (p. 24). Henderson (1991) explains, “Within this [interpretive] paradigm, the dynamic qualities of research emerge in the course of framing questions, immersion in the discovery of evidence, and interpreting meaning of data” (p. 25).

Although qualitative research is not analyzed using statistical procedures, it does require rigorous and precise data collection techniques that should still adhere to the discipline of systematic research. According to Bogdan and Bilken (1998), qualitative researchers “concern themselves not with the question of whether their findings are generalizable, but rather with the question of to which other settings and subjects they are generalizable” (p. 33). Qualitative researchers are more interested in “deriving universal statements of general social processes than statements of commonality between similar settings” (Bogdan & Bilken, 1998, p. 32). The focus is to understand the different realities within a setting, not to establish experimental criteria for comparison (Henderson, 1991). Henderson (1991) explains, “Researchers should...strive to be objective not by controlling variables, but by looking for a variety of explanations for the behavior that is being studied.

Further, qualitative researchers should aim to explain one hundred percent of the variance in a study” (138). This philosophy is different from the quantitative approaches that have been used in traditional social science research.

There are many approaches to conducting studies using qualitative research. Techniques such as interviews, observation, writing, and discussion provide numerous opportunities to collect and analyze a situation from the participant’s frame of reference. Sometimes it is not appropriate to rely exclusively on numbers and statistics to discover what occurs in an environment, and qualitative research provides the framework and structure from which to uncover the essence of what happens, how people feel, what people think, and what the underlying processes mean in terms of social and psychological process.

Theoretical Framework: Phenomenology

One approach to conducting qualitative research is the application of techniques from a phenomenological perspective. Phenomenology is actually the name for an entire philosophical movement that originated as early as the 18th century and has continued to grow and evolve (Husserl, 1980; Spiegelberg, 1975). It is both a philosophy and a theoretical approach to research design in human science studies that use qualitative methods.

First, it is important to define phenomenology. As the definitions and ideas about this concept changed throughout history, phenomenology in its most basic form came to be understood as the study of human experiences. The importance of uncovering truth and seeking deeper meanings through description are common traits found throughout almost all the definitions for phenomenology. Van Manen (1990) has been recognized as the leading scholar in phenomenology and educational research. He defined phenomenology as a human science that focuses on the study of the essence, or meaning, of a lived experience. Van

Manen (1990) explained, “Phenomenology is the systematic attempt to uncover and describe the structures, the internal meaning structures, of lived experience” (p. 10). Spiegelberg’s (1975) definition stated, “[Phenomenology] is the direct investigation and description of phenomena as consciously experienced, without theories about their causal explanation and as free as possible from unexamined preconceptions and presuppositions” (p. 3). In his book *Introduction to Phenomenology*, Sokolowski (2000) stated, “Phenomenology is the science that studies truth” (p. 185).

Second, it is important to understand how phenomenology differs from other qualitative research approaches. Van Manen (2002) compared phenomenology to other qualitative designs explaining, “Phenomenology differs from the various human science approaches such as ethnography, symbolic interactionism, and ethnomethodology in that phenomenology makes a distinction between appearance and essence...This means that phenomenology always asks the question of what is the nature or meaning of something” (van Manen, 2002). With phenomenology, it is important to understand that the individual is a fundamental part of the environment, and each individual has a different meaning for what is “real” or “true” based upon his or her perspective, experience, beliefs, values and ideas. This is known as the “lifeworld” for that individual (Husserl, 1980; van Manen, 1990). It is the goal of a phenomenological researcher to capture this perspective by describing the essence of one’s lifeworld based upon the particular time and setting.

Finally, it is important to understand how that phenomenology is complex, diverse and applicable in a variety of settings. There are generally six orientations to phenomenology, one of which is hermeneutic phenomenology (Sokolowski, 2000). Phenomenology involves description and perception whereas hermeneutic phenomenology

involves explanation and interpretation (Sokolowski, 2000; Stuckey, et. al., 2002; van Manen, 1990; van Manen, 2002). In hermeneutic phenomenological design, the goal is not only to describe the essence of an experience, but also to interpret meanings of events based upon the participant's perspective. Like other human sciences, phenomenology is concerned with searching for meaning or trying to make sense of a given situation (van Manen, 1990). Van Manen (1990) stated, "[P]henomenology does not produce empirical or theoretical observations or accounts. Instead, it offers accounts of experienced space, time, body, and human relation as we live them" (p. 184). Phenomenology is not used for prediction or comparison. For these reasons, outlining rigid methods is not recommended since the study needs to be open to interpretation and flexible to each individual's experience.

Phenomenology has been used in educational research to describe and interpret the meaning of educational experiences from students' perspectives. It is appropriate for educational researchers to engage themselves with their students and become part of their lifeworlds. This is how educators construct meaningful educational experiences for students (Stringer, 2004). This participant observation approach accepts that educators are part of both the teaching and research perspectives in a classroom environment. In phenomenology, this participant observation approach is referred to as close observation. Close observation is a method in phenomenological design where the researcher is actively involved in the setting while describing the situation as both a participant and a reflective observer (Moustakas, 1994). Phenomenological approaches to educational research do not call for control or experiments in the classroom. Instead, educators become part of the context they study and embrace their impact as part of the students' experience (Stringer, 2004).

Dickie (1999) used hermeneutic phenomenology to understand the lived experience of being a distance learner. In a unique approach, the author analyzed her own experience and those of three other students to explore how distance education is experienced. Using a narrative format, Dickie (1999) uncovered the connections between distance education, lifelong learning and personal development as expressed through her own personal story and those of her co-researchers.

Phenomenology has been used in recent studies to learn more about students' experiences in classrooms. Borges, Silva and Cunha (2004) used hermeneutic phenomenology to explore students' experiences and responses to a variety of teaching and learning techniques in engineering. They were interested in exploring whether or not knowledge was a process of construction or deconstruction. Through the use of a variety of teaching and learning techniques, they were able to connect students' experiences and higher performance to student centered learning activities using hermeneutic phenomenology. Finney (2000) used a phenomenological approach to determine the meaning of success as experienced by students in statistics courses. Finney's (2000) study confirmed the importance of using qualitative rather than quantitative approaches when the goal is to understand students' perceptions or experiences in a setting.

Phenomenology: Collecting Data and Writing the Results

It has been stated that qualitative research can take many forms. Studies that use phenomenology typically use interviews as a way to gather data. However, it is also acceptable to use other forms of data collection. Kracker and Pollio (2003) used a phenomenological approach to study how undergraduate students experience libraries. Instead of interviews, they relied on written data collected from a group of 118

undergraduate students. Students were asked to write in narrative format about their experience when using a library. The prompting question was open ended and structured so as to allow students to freely describe their experience using their own wording and language. Researchers then used content analysis and thematic analysis to uncover the meaning of library experiences for undergraduate students. This study demonstrated the effectiveness of using data collection techniques beyond interviews when conducting phenomenological research.

When writing a study using a phenomenological design, it is accepted practice to write in first person, sometimes using narratives, personal stories, anecdotes and autoethnographies (Ellis, 2000; van Manen, 1990). The purpose is to accept the role of the researcher as a critical element in the study, and usually this is documented through personal journals. According to Pepper and Thomas (2002), “[T]his approach provides the opportunity for researchers to intertwine their personal experiences with the professional aspects in an attempt to sort out their findings” (p. 159). Two relevant articles were found using autoethnography and learning environment research.

Pepper and Thomas (2002) situated themselves in their study of how leadership styles affect school climate. Using an autoethnographical approach, they explored the impacts of different leadership styles in their school climate. The use of the qualitative research paradigm coupled with an autoethnographical approach allowed them to explore deeper meanings and make connections to their personal experiences within the larger context of school climate. Evensen (2004) also employed the autoethnographical approach when she used phenomenology to study student perceptions and experiences of collaborative learning in law school. Although her role was not the same as the law students she was studying, she

still situated herself in the study and used personal experiences and reflections to make connections between the students' experiences and her knowledge of theoretical and conceptual models.

These studies allowed the researchers to collect richer, more detailed data connected to the purpose of discovering meaning. When the purpose of a study is to glean meaning from an experience, then phenomenology provides the lens through which to describe and interpret that experience from a variety of perspectives.

Educational Games and the Classroom Learning Environment

Research in gaming and simulation literature indicates that incorporating games into the classroom changes the learning environment (Boocock, 1968; Thatcher, 1986). Those who use games for educational purposes realize the game changes their classrooms, but an intensive database search reveals there are no studies in the gaming literature which have directly or systematically addressed exactly how the learning environment changes with the introduction of games into the classroom. In one article, Kriz (2003) discusses the role of games in learning environments to change social systems and create a learning environment that is interactive and problem based. Kriz (2003) explains how games can be designed as dynamic models that represent realistic systems and processes; however, in this particular article, he does not systematically test these observations. Few studies, if any, have been able to adequately support or deny the value of games as a teaching strategy or explain exactly how the inclusion of games changes the learning environment (Squire, 2002).

Before attempting to analyze the learning environment, it must be determined exactly what a "learning environment" consists of and how the presence of a game might exert influence on the environment as a whole. The learning environment is a complex system that

contains many variables including the learner, the teacher, the context, and the course material (Thatcher, 1986). Within this environment, games can exist, but what works for one group may not work for another (Dustin, 1977). Games are dynamic, and they require flexibility, openness, and a willingness to explore a variety of discussions that may lead to increased opportunities for learning. Instructors who use games must be willing to let go of some of their control and be willing to let the game and conversations take whatever paths lead to the students' learning (Thatcher, 1986). Research indicates the relationships between instructors and students change to more positive interactions as a result of this open and welcoming environment (Greenblat & Duke, 1981). In essence, as recommended by Spence (2001), the teacher who uses games to teach becomes the designer of the learning experience, where the activity is focused on the learners, not on the instructor.

Given the unstructured and more relaxed environment, the use of games requires a redefinition of the traditional assumptions and roles of the students and the teacher. In the gaming environment, the instructor and students play different roles than they do in traditional classrooms. The teacher becomes more of a facilitator of the learning process, and most of the student interaction is among peers (Anderson, 1998). Research has also shown how students begin to interact with the instructor and their peers in different ways, and as the learning environment changes to become more relaxed and open, it can have a positive affect on other class sessions as well. Greenblat and Duke (1981) explain, "There seems to be spillover to later classes, allowing more learning to take place as instructional impediments are removed" (1981, p. 141).

Benefits of Educational Games

Instructors and educational researchers report numerous benefits when incorporating educational games into the learning environment. Although educational games began in elementary school settings, their use in college environments has proven to be beneficial since adult learners perform well when the teacher is taken out of the traditional teacher dominated environment (Anderson, 1998; Boocock, 1968; Maidment & Bronstein, 1973). Games are unique and fun, and they offer different ways to present course material to students. Many of the earlier studies in gaming emphasized significant increases in student motivation, interest and engagement when games were used as teaching tools in the classroom (Dustin, 1977; Greenblat & Duke, 1981; Kirk, 2004; Thiagarajan, 1973). Studies typically focused on the outcomes of the game, such as test scores, and most research designs used a control group as basis for comparison and to support the benefits of incorporating games into the classroom.

Current research appears to be moving beyond simply assessing the product of game design to increased emphasis on the learning *process*. Students have demonstrated improved critical thinking skills and increased understanding of the dynamics of complex social systems and relationships (Greenblat & Duke, 1981; Kriz, 2003; Thiagarajan, 1973). The use of games has also been linked to an increase in students' retention of material and long-term skill application (Greenblat, 1988; Greenblat & Duke, 1981; Kashibuchi & Sakamoto, 2001; Kirk, 2004; Specht, 1991). Games help students bridge the gap between theory and practice, and lead to future application of discipline-specific skills (Kriz, 2003; Thiagarajan, 1973).

Depending on the design and intent of the game, learning can occur on two major levels: cognitive and affective. Cognitive learning includes the tangible, factual based

learning typically measured in pre- and post-test research designs (Thiagarajan, 1973). Cognitive learning occurs when students make the connections between the game and the course content. However, this is not the only type of learning that is embedded in educational games. Well-designed games have the increased benefit of addressing affective learning as well, which can be equally as important to student development as cognitive learning. Affective learning helps learners develop the ability to identify their own and other people's feelings, beliefs, values and attitudes (Dustin, 1977; Kashibuchi & Sakamoto, 2001; Thiagarajan, 1973; Thiagarajan & Stolovitch, 1978). Educational research emphasizes the importance of emotions in student learning and development (Jensen, 1995; Thatcher, 1986). Games can capture these emotions and use them as important elements of the learning process to demonstrate realistic complexities of situations outside of the classroom.

Anderson's (1998) study combined both the cognitive and affective learning outcomes. Anderson (1998) hypothesized that students would perceive the gaming environment as less threatening and more enjoyable than a lecture-based course, thus increasing their ability to learn. The research supported this hypothesis, and the results indicated the gaming method increased student exam scores by 11.4% over those who were taught using only the lecture-based course. Students also responded they were more likely to take risks in the game setting since the learning environment was more open and less structured than the lecture setting (Anderson, 1998). Kriz's (2003) research also supports Anderson's (1998) findings that students are more willing to take risks and make mistakes during a game because they perceive the learning environment to be more friendly and open to learning through trial-and-error.

Well-designed games can also be designed to simultaneously address a variety of learning styles within one well-designed activity (Dempsey, Haynes, Lucassen & Casey, 2002; Thatcher, 1986). In a study intended to assess the instructional applications of game design for adults, participants representing all four of Kolb's learning styles were able to learn effectively using educational games (Dempsey, et al, 2002). Krits' (1991) study went a step further and analyzed behavior by personality type using the Myers-Briggs inventory to divide students into groups as part of the analysis of a natural resources management game.

Games enhance cooperative learning and team building, and they encourage learners to work towards a common goal (Dustin, 1977; Thiagarjan, 1973; Kirk, 2004). Because games give students instant feedback on student performance, they can also be used to help students practice or refine knowledge and skills and to help review key concepts (Anderson, 1998). Games help instructors identify gaps or weakness in students' knowledge and reinforce new relationships between important or complex concepts (Gredler, 1992; Greenblat, 1988; Greer, 1992; Kirk, 2004). Research indicates games also enhance group dynamics and aid in the development of socialization and communication skills (Boocock, 1968; Greenblat & Duke, 1981; Kirk, 2004). Others studies support the idea that games lead to increased understanding and demonstration of discipline specific skills, especially in training and development settings (Greenblat & Duke, 1981; Thiagarajan, 1978).

Games can also simultaneously encompass several other active learning strategies such as role-plays, debates, cooperative learning activities, computer-enhanced instruction, simulations, case studies, small group discussions, and reading, writing and speaking tasks (Kirk, 2004; Thomson and Dass, 2000). In a unique study, Thomson and Dass (2000) compared two types of experiential education strategies rather than using a control group.

The purpose of their research was to determine if a game has greater impacts on the students' self-efficacy than the use of case studies. They found significant evidence of enhanced self-efficacy in students who participated in a strategic management game (Thomson and Dass, 2000). The case studies method resulted in increased learning as well; however, this approach enhanced writing skills rather than improvements in self-efficacy.

Although the purpose of this study is to specifically analyze the use of educational games, it is valuable to consider the benefits associated with simulated gaming environments as well since they are so similar. In simulations, the activity is designed to reproduce a realistic issue or situation in a controlled environment (Greenblat & Duke, 1981). Simulations are cost-effective strategies for demonstrating real-world environments where participants can take risks and make mistakes with hypothetical consequences from which learning can occur (Greenblat & Duke, 1981; Thiagarajan, 1973). Additionally, simulation games allow students to feel the experience of complicated "real world" situations in a relatively short amount of time (Thiagarajan, 1973).

Challenges of Educational Games

The use of educational games in the classroom is not a new phenomenon; however, some educators are reluctant to give credibility to such a teaching strategy, especially in the college environment. Games that are misused or used solely for entertainment purposes have given this type of teaching strategy a negative reputation (Gredler, 1992; Greenblat, 1981; Kirk, 2004; Maidment, 1973; Petranek, 2000). For some, entertainment in education is not appropriate, and the notion that learning can be fun is for other settings outside of academia. Games are time consuming to create and play, and some environments do not lend themselves easily to this form of teaching and learning.

Even if an educational game is carefully designed with an emphasis on learning outcomes and processes, participation in a game does not guarantee that learning has occurred (Thiagarajan, 1973). In fact, even if learning is embedded throughout the game, sometimes a game may not result in any *new* learning at all (Thiagarajan, 1973). Sometimes the outcomes intended to be gained from participating in the game are not learned, perhaps due to the level of development of the players, their past experiences, or as in the case of younger college students, insufficient real world experience to apply the new knowledge to.

Another challenge of games is the recognition that there are multiple realities and perspectives. Not all of the students will learn the same concepts from a game since each participant has a different experience (Greenblat & Duke, 1981; Thiagarajan, 1973). To address this problem, all well-designed games include some form of reflection to allow for discussion, analysis and application of concepts derived from playing the game.

Game designers also wonder about poor game design and its impact on the students (Greenblat & Duke, 1981). In simulation games, for example, the goal is to reproduce realistic situations in a manageable environment. The idea of controlling reality may actually distort the participants' perceptions rather than providing a meaningful learning experience (Thiagarajan, 1973). Educators ask questions such as "How do poorly designed games affect students' learning?" and although research has not explored this aspect of games, there is a need to address this issue in future research. Not all games are created to enhance learning; therefore, it is important to understand what elements result in positive or negative gaming experiences.

Finally, research suggests games are effective learning tools for heterogeneous populations by including people with a variety of backgrounds and experiences (Thiagarajan,

1978). However, more research is needed to support this hypothesis. Games have been proven to generate awareness of diversity issues, but testing games with a variety of audiences needs further research.

However, when used as part of the experiential and active learning models of theorists such as Rogers, Dewey and Kolb, instructional games can provide a common experience which can be analyzed, reflected upon, adapted and customized to meet the needs and objectives of any type of course and any type of level of education (Gredler, 1992; Greenblat, 1988; Petranek, 2000).

Challenges of Game Research

Early game research was mostly anecdotal, resulting in a call for increased quantitative research designs with more “scientific” findings using statistical methods (Anderson, 1998; Greenblat & Duke, 1981). Researchers focused more on the cognitive learning addressed through educational games, perhaps to establish this type of inquiry as a legitimate science. These research designs generally made weak connections between the game and the actual learning objectives, and they failed to acknowledge external influences on the gaming environment such as the Hawthorne Effect.

Game research in education is complicated by numerous variables, which early studies have not often controlled for (Greenblat & Duke, 1981). According to Greenblat and Duke (1981), there are several variables to consider in the study and research of games, all of which need to be considered since they have been proven to have an impact on the learning outcomes:

1. Administrative variables:
 - Who is the facilitator? What is his/her relationship with the students?
 - What kind of debriefing occurred?
 - How long is the game played?

2. Internal game variables:
 - Does learning occur? If so, what kind?
 - Do the students play roles in the game?
3. Group variables:
 - How large is the group?
 - How are group dynamics affecting the game?
 - Do winners and losers have different attitudes about a game?
4. Personality variables:
 - What kind of personalities do students have?
 - Are there certain students who enjoy the game environment and others who do not?
5. Cognitive style variables:
 - What kinds of learning styles are present in the group?
 - How do students think about the concepts in the game as they relate to the course?
6. Game ability and academic ability:
 - Are students able to think abstractly and relate to the learning outcomes attached to a game?
 - Do some students have higher gaming ability than academic ability, and vice versa?

Game research is also complicated by a lack of sufficient sampling techniques. Early studies of those who conducted research on games have students readily available in their classes, and the researcher is the instructor for the course (Greenblat & Duke, 1981). This design poses a new set of challenges for researchers to remain as objective as possible to determine what types of impacts games have on students' learning. Additionally, because games are so dynamic and specific to a certain context, the findings are difficult to generalize to other settings.

Finally, the benefits or outcomes obtained from educational games are not easily quantifiable. Depending on the purpose of the study and the outcomes assessed, game research may need to move from relying on quantitative statistical analysis to qualitative research designs. There are disputes about this observation, where some researchers feel there needs to be more quantitative analysis and others feel there should be more qualitative approaches. The field began with the classical pre-test/post-test design, but in general, it

appears educational researchers want richer, more detailed analysis of the benefits of games in the classroom. A pre-test/post-test design does not capture all of the elements embedded in a game, and there is a need for researchers to experiment with new research designs.

Debriefing

One of the most important components of experiential educational is the need for reflection. In educational games, reflection is referred to as “debriefing”, and it is the most important aspect of using games for teaching purposes (Gredler, 1992; Greenblat & Duke, 1981; Thatcher, 1986). In a gaming environment, students assume several roles simultaneously: they are players in a game; they have a role to play within the context of the game; and they are students in a class (Greenblat & Duke, 1981). Students need to reflect on each perspective, as well as the opinions and experiences of their peers. During a game, students typically participate or observe only one perspective of the entire process (Peters & Vissers, 2004). After the game, time is needed to compare and contrast various perspectives, experiences, attitudes and beliefs regarding the “big picture”. Students may also need help identifying the connections between course content and the purpose of the game. This process of reflection is referred to as debriefing.

In the context of experiential education, Thatcher (1986) defines debriefing as “the process of reflecting on and exploring what had occurred from the point of view of each of the participants” (263). This definition highlights the importance of individual perspectives in the reflection process. Thiagarajan (1992) defines debriefing as “an instructional process that is used after a game, simulation, role play, or some other experiential activity for helping participants reflect on their earlier experiences to derive meaningful insights” (Thiagarajan, p. 161, 1992). This definition emphasizes debriefing as an instructional process from which

to make connections and enhance learning, not just to listen to others' points of view. It should be noted that some games are designed to incorporate reflection during play rather than waiting until after the game has occurred. Peters and Vissers (2004) discuss intermediate debriefing as a potential element in the design of educational games. Intermediate debriefing occurs throughout play, serving as a way to help guide students through complex thinking skills or alternative courses of action (Peters & Vissers, 2004).

Theories on debriefing are virtually nonexistent, leading game researchers to rely on the processes of reflection in the larger realm of experiential education to provide the theoretical framework for connecting the game to the learning outcomes (Peters & Vissers, 2004). Historically, debriefing was used as a coping mechanism to help people process traumatic experiences (Lederman, 1992; Peters & Vissers, 2004). This "desensitizing" did not necessarily lead to new learning, but it served as a way to help the participant begin to reflect on the experience and eventually cope with the tragedy. In the last three decades, debriefing has emerged as a process designed to capitalize on potential learning outcomes; however, in some games and simulations it is still recommended that some form of desensitizing occur to address emotional situations and personal reactions (Lederman, 1992; Thiagarajan, 1992).

Debriefing can be formal or informal, and it can take on many forms, including large group discussion, small group discussion, written analysis and personal journals. It can also be embedded in another activity called a "d-game", which is a game designed specifically for the purposes of debriefing (Thiagarajan, 1992). Thiagarajan (1992) argues that debriefing can easily become too rigid and boring by simply asking questions, and he advocates using a d-game to debrief the participants while simultaneously addressing the reflection questions.

This approach results in increased excitement, enthusiasm and engagement for both the facilitator and the participants (Thiagarajan, 1992).

Debriefing has many purposes depending on the design and outcomes of the game. One purpose of debriefing is to assess how well students are bridging the gap between theory and practice (Peters & Vissers, 2004). During reflection in educational games, the emphasis should be on determining students' knowledge and skills relating to learning objectives as defined by the course (Peters & Vissers, 2004). Some level of ambiguity is to be expected in educational games since students are in the experience to learn (Lederman, 1992). Some students will not be able to make the real-world connections between the game and the learning outcomes without direction, therefore debriefing is needed to guide this process (Peters & Vissers, 2004). It should be noted, however, that not all students are capable of the same levels of reflection, and some students may take more time to see the connections and purpose of the game (Peters & Vissers, 2004).

Another main purpose of debriefing is to allow students the opportunity to develop communication skills (Kriz, 2003). An added benefit of educational games is their potential to enhance communication and social skills (Dustin, 1977). Debriefing supports students' continued engagement and contribution to the class outside of the gaming environment by allowing them the opportunity to express themselves in a group and as individuals. Debriefing allows students the opportunity to step out of the game and compare and contrast their experience to others'. In competitive or emotionally charged games, debriefing becomes increasingly important to facilitate cooperation and re-establish a supportive learning environment (Steinwachs, 1992; Thiagarajan, 1992).

There are many varieties of models, steps, and approaches to debriefing (Petranek, Corey & Black, 1992; Lederman, 1992; Steinwachs, 1992; Thiagarajan, 1992). Lederman (1992) describes debriefing as a stepwise process involving three general phases:

1. Introduction to systematic reflection and analysis: Explains how the reflection session will be conducted and what happened during the activity.
2. Intensification and personalization of the analysis of the experience: Participants begin to describe and interpret the meaning of their personal experiences, feelings and behaviors.
3. Generalization and application of the experience: Participants move from their own behaviors and feelings to a discussion regarding the larger implications of the activity.

Thiagarajan's (1992) seven phase model for debriefing involves some of the same elements as Lederman's process; however, the final three phases offer increased possibilities for discussion and critical thinking. Thiagarajan's (1992) model involves seven main questions:

1. How do you feel?
2. What happened?
3. Do you agree?
4. Deja vu? What is real world relevance of the activity? (Have you encountered this before? Do you think you will experience this again?)
5. What would you do differently?
6. What if...?
7. Can you improve this activity?

Questions one through four are similar to Lederman's model; however, questions five and six offer alternative scenarios and actions, forcing students to think beyond their actual experience in the game. Question seven is a unique addition to most debriefing models.

Asking the students to improve the game gives them ownership of the activity and an

opportunity to think beyond the prescribed rules to suggest other ideas and settings, which could be relevant in their ability to apply the experience to future situations. Finally, specific reflection questions can be included to guide students through the activity so they can begin to connect the elements of the game to the content of the course.

The ability for students to articulate their own learning is crucial to the reflection and learning process, and it helps students organize their thoughts and connect their actions with their experiences (Thatcher, 1986). During any type of debriefing phase, students are asked to present their experiences, ideas and opinions either through speaking or writing, or a combination of both. This is a time to consider not only what actually happened, but also to ask “what if” to encourage critical thinking and alternative courses of action. “During a simulation participants unconsciously process all types of information: facts, emotions, strategies, outcomes, relationships, feelings, and much more” (Petranek, Corey & Black, 1992, p. 176). Students need time to stop and think about everything that has taken place, both in the group and within themselves as individual players in the game.

Most of the research on debriefing focuses on why it is important and how it can be done effectively, but there is a need to understand if and how debriefing actually enhances the learning process. “Research tends to concentrate on the cooling down function of debriefing, and few attempts have been made to explore how debriefing may contribute to the learning process” (Peters & Vissers, p. 71, 2004). In an effort to address this need, Petranek’s (1992, 2000) research placed increased emphasis on written debriefing, especially in the academic environment. Petranek (2000) explained that written debriefing allows for individual reflection, and he argues that writing is the next crucial step in the experiential learning cycle because it enhances analytical learning, individual interpretation, organization

of ideas, and development of personal meaning resulting from the experience (Petranek, 2000).

After an extensive review of literature, there have not been any studies found which are designed to compare how different types of debriefing may contribute to the learning process. Although it is generally agreed upon that debriefing plays a critical role in educational games and learning, exactly what kind of reflection and process impacts learning has yet to be determined.

Educational Games in Parks, Recreation and Tourism Management

Few studies have been conducted on the use of games in parks, recreation, and tourism management courses. Most games in this field emphasize natural resource management and policy development. Throughout the literature, only two articles were found which analyzed the use of educational games to teach parks and recreation concepts.

Dustin (1977) analyzed both cognitive and affective learning in QUAGMIRE, a recreation resources management game. His study compared students in two different groups, a self-role congruence group and a self-role incongruence group. Self-role incongruence, or cognitive dissonance, did not affect cognitive learning; however, it played a significant role in students' affective learning and attitude towards games as an instructional strategy. Students also indicated they were able to bridge the gap between theory and practice by more clearly seeing the connections between the outcomes of the game and "real world" issues.

Kirts (1991) studied the impacts of the COMMONS game to give students experience with the frustrations and decision-making skills needed when managing natural resource properties and common areas. The COMMONS game is designed to teach students about

social dilemmas. Kirts (1991) found that the combination of a lecture and a game increased teaching and learning effectiveness for concepts such as trust, greed and cooperation. She also found that some students were skeptical of the game process in a learning environment.

Although these educational games were applied in parks and recreation classrooms, neither one of these games were used in an introductory course. Neither one of the games analyzed the impact of the game on the learning environment, only suggesting that the game was a creative and effective way to teach course concepts.

This chapter provided a discussion of the relevant literature related to teaching and learning, learning environments, and educational games in higher education settings. The purpose of this chapter was to provide a foundation from which to study the impact an educational game has on the classroom learning environment. The next chapter will discuss how the literature guided the overall research design for this study.

CHAPTER 3

METHODS

Chapters one and two provided the introduction and background information for this study. This chapter is designed to explain the methods and research questions that guided the data collection and analysis processes.

The purpose of this study was to describe and interpret students' perceptions and experiences in a learning environment that included a game as teaching and learning tool. This qualitative study used hermeneutic phenomenology to understand how students experience a learning environment that includes an educational game. As the instructor for the course and the researcher for this study, I used an autoethnographical approach to explain and interpret the data (Ellis, 2000).

As the instructor of the course and the creator of the game, I have been actively involved in the whole process; however, I only know the experience of the game from one perspective: mine. I have played only the role of the facilitator, and although I have gathered feedback from students about the game, I do not know what it is like to actually experience the game as a student in a classroom.

In qualitative research, triangulation serves as a mechanism for reducing bias and ensuring accurate interpretation of the data. Denzin & Lincoln (1998) describe five main approaches to triangulation in qualitative research, one of which is data triangulation. Data triangulation involves the use of different sources of information to gather data. These sources may include people, places, and/or times. In this study, I used three perspectives to describe what occurred in this learning environment: (a) I gathered data from the students' reflection assignments after the game; (b) I kept a personal reflection journal throughout the

semester; and (c) I worked with two peer observers during the two weeks we played the game. Gathering data directly from the students allowed me to interpret the meaning of this experience from their point-of-view. Using data triangulation, I was able to understand the learning environment from two other perspectives, including my own interpretation of what occurred in the classroom.

Research Questions

The combination of learning environment research, educational games and phenomenology led me to formulate three specific research questions. The three research questions for this study were:

1. What are college students' perceptions and experiences in a classroom environment that includes an educational game for teaching and learning?
2. How is students' learning influenced by an educational game in the classroom?
3. How does a learning environment change when an educational game is introduced?

Description of Participants and Setting

The participants in this study were students enrolled in an introductory Parks, Recreation and Tourism Management (PRTM) course during the Spring 2005 semester at North Carolina State University. The course was required for all PRTM majors; however, it could be taken as a general education elective by non-majors. Thirty-two participants were in this study, including majors and non-majors. There were eight freshmen, 13 sophomores, nine juniors, and two special/lifelong education students. All of the students' assignments were part of the regular design of the course. The students' opinions, perceptions and observations about the game did not have any effect on their final grades. A sampling frame was not necessary since all of the participants were involved in the study.

My class met for 50 minutes each day on Mondays, Wednesdays and Fridays in a large lecture hall. The room was an important factor in determining how the overall setup of the game was designed. This room was designed to seat approximately 90 students. I only had 32 students, making personal space easy to acquire and empty seats distracting. The students sat in chairs that had attached desks that could be folded up or down whenever necessary. There was a large desk for me at the front of the room that was equipped with a projector, a screen, a computer, a VCR, and a variety of other technological equipment. Neither the students' chairs nor my large desk were movable.

I was the instructor for the course and these were my students so gaining access to the site was not difficult. In most of the gaming literature, this scenario is typical. Many instructors who design games for education and research purposes seek the convenience of testing games and evaluating learning environments using their own classrooms. Fortunately, in my department, instructors are given the freedom to teach classes in a variety of ways, and the use of this game in this introductory course did not present any problems.

Hermeneutic Phenomenology

This study was guided by the principles of hermeneutic phenomenology, where the goal was to describe and interpret a lived experience based upon data collected from the participants' frame of reference and observations from the researcher. The goal was to describe and interpret the students' lived experience of playing an educational game in a college classroom.

In this study, both the empirical and reflective methods of phenomenological research were employed. The purpose of the empirical method was to explore examples and accounts of a person's lived experience. Techniques included describing experiences and gathering

data from written descriptions (van Manen, 1990). This study used three specific empirical methods:

1. I gathered data from the students' reflection assignments. This assignment was a reflection paper written at the conclusion of the game and turned in on the last day of class.
2. I described the learning environment from my perspective by maintaining a personal reflection journal. The reflection journal was kept throughout the semester using close observation techniques.
3. I gathered data from the peer observers notes and discussions. Two peer observers sat in on the game, but did not interact with the students. I met with the peer observers individually to discuss their observations.

Reflective methods involve interpreting the meanings of a lived experience. This study used one type of reflective method: thematic analysis. Thematic analysis is a creative process that analyzes the themes that arise from an experience or situation (van Manen, 2002). ATLAS 5.0 allowed me to code all of the data into themes. First, I loaded all of the data from the reflection assignments, my journal, and the peer observers' feedback into ATLAS. I merged all of the data into one cohesive document for cross-referencing and analysis. Then I followed van Manen's (1990) recommendations for identifying themes using textual data. Three approaches exist for isolating thematic statements in phenomenological research: (a) In the holistic or sententious approach, we look for the fundamental meaning of the text as a whole; (b) In the selective or highlighting approach we search for key phrases and statements; and (c) In the detailed or line-by-line approach, we

analyze every single sentence or paragraph and ask its meaning to the phenomenon (van Manen, 1990, p. 92-93). I used a combination of all three approaches to analyze my data.

I began by reading the whole document without making any comments or observations to understand the overall idea of the course and classroom environment without searching for any particular theme or idea. Then, I used van Manen's detailed approach to study the data more intently. I used ATLAS to highlight and code the text sentence by sentence. During this step, I used open, axial and selective coding to code the data into themes (Strauss & Corbin, 1990). Finally, I used the selective approach to search for key phrases that convey the meaning and purpose of this study. I highlighted these selections and documented my comments using the "memo" tool in ATLAS (Strauss & Corbin, 1990).

I used reduction and intentionality techniques to ensure correct interpretation of the setting. Reduction is the process of reflecting on all assumptions and expectations prior to the experience in order to accept the phenomenon for what it is (van Manen, 1990).

Intentionality is describing how a phenomenon is experienced. It includes what is seen, felt, heard, observed, thought, said and experienced (van Manen, 1990). I documented these thoughts in my research journal. The peer observers were introduced to intentionality to ensure accurate comparisons between my observations and the peer observers'.

Trustworthiness: Validity, Reliability and Objectivity

Qualitative research is sometimes criticized for lack of reliability and generalizability (Henderson, 1991). Although it is not the intent of phenomenology to generalize to other populations, a study must adhere to sound research practices that reduce the chance of bias due to poorly constructed research design. In quantitative research, this process is referred to as validity and reliability. In qualitative research, the terminology is different but the

meanings are the same (Henderson, 1991). The four terms are: credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity). Each of these issues is addressed below.

Credibility refers to the internal validity of the study. In this study, I established the research questions prior to gathering data to give me a general sense of direction when describing and interpreting this learning environment. I was immersed in this environment for the entire semester, and I documented every class session using my reflection journal. To address issues such as the Hawthorne effect and evaluation apprehension, I followed procedures that would not introduce bias into the study. I did not read the students' reflection assignments prior to submitting final grades so as not to affect any outcomes of the course. If there were questions about a student's reflection assignment, I contacted him or her by email for further clarification. I gave students the consent letter at the end of the semester to ensure I observed authentic reactions to the learning environment.

Transferability refers to the external validity of the study. To what other settings or contexts might the results of this study be generalized? In this case, generalizability did not mean gathering a representative sample or ensuring there were enough participants involved in the study. Instead, the focus was on the degree to which the results of this study can be generalized either to similar contexts or to similar kinds of people. Careful consideration was given to describe many details of the participants and context.

Dependability refers to the reliability of the study. In qualitative research, we are not interested in exact replication of a study (Bogdan & Bilken, 1998; Henderson, 1991). Instead, efforts should be made to ensure what I recorded and what actually occurred in the learning environment. To address this concern, I worked with two peer observers and I kept

my own journal to maintain a permanent record that can be traced and verified. All quotes were double checked against the original documents.

Confirmability refers to the objectivity of a study. Henderson (1991) explains, “Researchers should...strive to be objective not by controlling variables, but by looking for a variety of explanations for the behavior that is being studied” (p. 138). Every effort must be made to explain one hundred percent of the variance to ensure objectivity. I analyzed, coded, and explained every student’s comments, regardless of their academic performance. The two peer observers’ feedback was also coded and analyzed to ensure objectivity.

Additional challenges that affected my study were students who did not give consent and those who did not complete the reflection assignment. Consistent with qualitative methods, explanations were given for all of these situations in order to explain all of the variance.

Background Information and Description of Leisureopoly

The purpose of this study was to describe and interpret students’ perceptions of and experiences in a learning environment that included a game as a teaching and learning tool. The game was called Leisureopoly, and it had been tested in an introductory course in Parks, Recreation and Tourism Management (Honeycutt, 2004). I was the researcher for this study, the instructor of the course and the creator of the game. These are the main reasons I chose close observation as one of the research methods. Careful attention was given to ensure all preconceived notions, expectations and prior experiences were considered when analyzing how the game impacted the learning environment. Finally, it was equally important to understand the background and evolution of Leisureopoly related to the context of the course. Although pilot tests are not used in phenomenological design or qualitative research, it was

important to test the game over time to ensure it could provide the setting for a quality learning experience.

Leisureopoly has been played in four different introductory classes over the last two years. Since its creation, Leisureopoly has undergone several changes. With each new adaptation, students' feedback has become increasingly positive. Students have been able to recall what they learned, how they learned it, and how it will apply to them in the future. As the game has become more dynamic, students have demonstrated more complex levels of learning by applying course material and integrating it into their previous experiences outside of the classroom. In the game, some students created sophisticated agencies, programs, and events that illustrate the capability of the game to stimulate different levels of thinking beyond those skills typically found in introductory courses.

Careful attention has been given to maintain detailed and accurate records of how the game has evolved and changed over time based on students' feedback, the instructor's observations, and peer observers' recommendations. The following paragraphs explain the basic format of the game, how it has evolved over time, and general observations about each version of Leisureopoly.

The Game: Leisureopoly, Version I (Summer, 2003)

To maintain a quick pace, the game seems to work best when played with a group of approximately 20-25 students. Students were divided into groups of four to five members, and an accountant and spokesperson was selected for the group. Each group represented a leisure service agency, which may or may not actually exist in the "real world". For example, I selected the following agencies for this class: Wild Dunes Resort, National Park Service, YMCA, All-Star Sports Complex, and the Metropolis City Parks and Recreation

Department. The goal was to create agencies that represent a broad spectrum of leisure service organizations, yet not so different that they were not able to compete for the same resources and encounter some of the same challenges. The “winner” of the game was the group, or groups, who complete their mission statement. For example, if the group represents a “for profit” agency, then they needed to finish the game having made a profit, while a non-profit agency had different measures of what they consider success.

Given the amount of time involved and the numerous opportunities for class discussions, the game was originally designed for three days. On day one, the rules were explained and groups were selected. The first task for each group was to create a mission statement based upon the type of agency they represented, and each group had to explain how they were funded (taxes, donations, etc.). Successful completion of these two tasks required students to understand some of the basic functions of their particular agency, which was covered in a previous reading assignment and class discussion. Once these two tasks were completed, each group received two million dollars, which had to be managed and accounted for during the entire play of the game.

On the second day, we began playing the game. Groups took turns rolling the die, and the number they rolled corresponded to the type of card they received. This did add some element of chance to the game; however, by designing cards in ways that require students to use skills or information from the course, I eliminated the idea that students simply reacted to whatever the card says (Gredler, 1992). For example, in my class, I used this system: by rolling a one or a six, the group selected an amenity card. Examples of amenity cards included a 25,000 square foot building, a tennis court, a gymnasium, a pool, a playground, a fleet of vans and buses, 10,000 acres of land, and any other types of amenities

that would be found in the leisure service industry. If they chose to purchase the amenity, they had to justify their purchase based upon the goals stated in the mission statement. If they decided not to purchase the amenity, then it went up for auction and other groups placed bids until the highest bidder won. Throughout the play of the game, agencies could sell or trade their amenities to other groups, which usually resulted in some interesting debates between agencies.

By rolling a two, the group selected a management card; rolling a three resulted in a maintenance card; rolling a four resulted in a programming card; and rolling a five resulted in a quiz card. Quiz cards provided me the opportunity to include miscellaneous questions that might not be covered in other categories or to provide examples of exam questions. Each card also included different levels of financial rewards. For example, on a programming card, if a group listed the four general categories of programming, then that group received \$50,000. If the group could list *and* explain the four categories, they received \$75,000. Much of the literature recommends students not be penalized for incorrect answers (Gredler, 1992). If incorrect answers were given, the group lost their turn. The game stopped for a moment while the class discussed the correct answer. Play continued until the instructor decided the game covered the topics of interest. “Winners” were determined by assessing whether or not agencies completed their mission statements.

Because the game has the opportunity for increased class discussion, play continued for one more session. This final session was devoted to debriefing, or reflection. Reflection is the most important aspect of experiential education, and it should be planned more carefully than the actual game (Gredler, 1992; Jones, 1980; Petranek, 2000; Specht, 1991; Thatcher, 1986). During the debriefing phase, instructors should reinforce connections

between the experience and the course content. Many researchers suggest reflecting in small groups, as a large class, and then individually. The importance of individual reflection is often overlooked by most instructors using the game format as a teaching tool; therefore, efforts should be made to allow students time to reflect individually on their personal experience with the game (Petranek, 2000). This can be done by a short, informal writing assignment, or with a more formal paper integrating elements of the game into the content of the course.

Leisureopoly, Version II (Fall, 2003)

In the fall of 2003, I decided to test Leisureopoly in another instructor's class. This was the first time the game was played in a classroom where I was not the regular class instructor. It was also the first time the game had been played during a regular semester with twice as many students. The game was played in the same format, but we had to increase the number of groups from five to seven. With a group of 40 students, the pace of the game slowed significantly, resulting in a loss of momentum. There seemed to be more "off topic" discussion within and between groups who were not rolling the die. Students indicated they enjoyed the game and learned concepts related to the textbook, but without my direct involvement in teaching the course, I do not know how much impact the game had. However, the instructor for the course indicated she referred to the game throughout the duration of the semester to illustrate course concepts.

It was during the end of this version of the game that I realized there needed to be input from the clients or customers of an agency (such as the general public or club members). This component was especially important since the purpose of what we do in leisure service organizations is to serve our clients and enhance their quality of life.

Interestingly, during one of our debriefing sessions in this fall course, I asked the students if they thought the game was missing anything. Some of them immediately noticed the game did not allow them to consider their customers' input when making decision about programs and services.

Leisureopoly, Version III (Summer, 2004)

During the summer of 2004, the basic format of the game stayed the same. There were 18 students divided into five groups representing five different types of agencies. However, in this version of the game, I made three important changes. First, to address a problem from the second version of the game, I included a new category of cards called "Community Cards". These cards illustrated the community or customer's input and forced groups to react and make decisions based upon their clients' needs.

Second, to incorporate a new skill into the game, I required each group to design a realistic program or special event based upon their type of agency and mission statement. Each agency had to describe the program including, purpose, goals, objectives, location, target audience, estimated cost, and any other elements which would impact the design of the program.

Third, I incorporated one written reflection homework assignment after the second day of playing the game. This allowed the students an opportunity to express how they were feeling, what they were thinking, and what they thought would happen as the game continued. This allows for individual reflection as well as group and class reflection.

According to the individual and group reflections, this version of the game seemed to enhance students' learning and understanding of how each type of agency operates. For the first time, I had two agencies create a partnership to maximize their resources. The nonprofit

and commercial agencies worked together to share amenities, and during their programs, the commercial agency became the major sponsor for the nonprofit group's special event. The inclusion of both the community cards and the program design assignments generated more creativity within the class. When each group presented their program to the class, they demonstrated creativity, but some of their programs were unrealistic. Finally, students still indicated the game moved slowly, and they wanted something to do while they waited for their turn to roll the die. For future versions of the game, I will redesign the program planning assignment to help groups stay focused on more realistic goals to support their agency's mission statement. Additionally, I will address ways to increase the speed of play so groups stay on task.

Leisureopoly, Version IV (Fall, 2004)

During the fall of 2004, the game was played with a class of 32 students divided into six groups. The basic format of the game stayed the same; however, there were several new challenges to overcome. First, the design of the room severely restricted group interactions and my ability to move easily from group to group to provide assistance and find "teachable moments". For the first time in the game's history, the tables in the classroom were bolted to the floor, meaning there was limited space to accommodate groups. There were only 31 chairs for 32 students and one student always had to sit on a table. In their reflections, several students commented on the poor design of the room, noting that their group strategies were negatively influenced since other groups could eavesdrop on their conversations. This experience stresses the importance of a classroom's physical environment on the overall play of the game.

The second challenge of this semester's game was the time limitation. Our class met on Mondays, Wednesdays, and Fridays for only 50 minutes at a time. Because of the limited time, I added another day to the game. We played for five days, with the last day consisting mostly of reflection and debriefing. More time is still needed to play the game in a 50-minute class session.

A couple of changes were made to address the problem areas identified in the previous semester's design. First, to reduce the lag time between rounds of play, all groups answered the question posed on the card as it applied to their particular agency. There are a few advantages to this design. Since all of the groups had to respond to the question, students were able to see how the concept or question could be applied to a variety of scenarios, which is a perfect application for an introductory course. This strategy also kept the groups busy between rounds of play since they had to research the question and apply the answer directly to their particular agency. Finally, this approach kept all groups attentive and engaged because they had to answer the question correctly based upon their mission statement.

The only disadvantage to this design is that all groups who answer the question correctly were awarded money, which did not give any group a particular advantage over any other. As a result, none of the groups seemed severely strained financially. The element of risk-taking was reduced because groups had the money to accomplish whatever goals they had established. Future designs should incorporate more risk when buying, selling, and answering questions on the action cards.

The second change for this version of Leisureopoly emphasized the program planning aspect of the game. Groups were awarded for creating realistic programs, not just creative

ones. Due to the time limitations, groups shared their ideas, but we did not have time to evaluate or discuss them.

The third change for the game emphasized reflection. The students completed two reflection assignments: one focusing on their experiences, feelings, and expectations of the game, and another focusing on how they would improve the game. This allowed for a quick assessment of the game and helped the students feel they have an investment in the design of the game for future classes. For the final reflection assignment, students completed an articulated learning worksheet, modeled after NC State's Service-Learning program (Clayton, 2005). This program emphasizes integration of service experiences and reflection to help students apply their course material to realistic problems outside of the classroom. In an articulated learning, students must state what they learned, how they learned it, and why it matters or how will they use it again in the future. This exercise helped the students clarify exactly what they learned from the game itself, and it helped me assess the types of learning that occurred.

According to the individual reflections and articulated learning worksheets, students in this class demonstrated a wider variety of learning outcomes than any previous class. Their reflections ranged from the basic understanding of a mission statement to the complexities of ethical decision-making when working to achieve success. As in the past, two agencies merged into one, only this time, the commercial agencies merged into one corporation which created a formidable opponent for the other groups. For the first time, the local parks and recreation agency merged with a commercial agency to host a program and share resources. And finally, conflict occurred between the nonprofit and one of the commercial agencies when their partnership deals failed. Although this created a

competitive atmosphere, the students were fun and energetic as they continued to play the game and reflect on their experience.

Leisureopoly, Version V (Spring, 2005)

During the spring semester of 2005, we used a new textbook for the course. I was not sure how to incorporate this new text into the design of the game, but in the end, it worked. The only limitation was that I was not able to cover the last two chapters of the textbook.

This semester, the game was again played with a class of 32 students divided into six groups. I added a new group called the “State Tourism and Promotions Department” because there were so many students interested in promoting special events and destinations. The basic format of the game stayed the same; however, there were several new challenges to overcome. First, the design of the room posed a challenge for group work. Groups were spread out in the lecture hall, which meant they could not eavesdrop on each other’s strategies, but it caused me to have more ground to cover when trying to move from group to group to address questions and find “teachable moments”. This slowed down the play of the game, and many students commented in the debriefing phase that the game needed to move at a quicker pace. As with last semester, the impact of the physical layout of the classroom had an impact on the design of the game.

A couple of changes were made to address the problem areas identified in the previous semester’s design. First, to address the problem of limited time, I added a sixth day to the game, with the last day consisting mostly of reflection and debriefing. More time is still needed to play the game in a 50-minute class session because we could only roll the die two or three times before class ended. A second change was the use of PowerPoint© to display the action cards on the overhead screen. This strategy allowed for all groups to read

the question instead of me reading it aloud several times. I will continue to use this approach as long as there is technology in the classroom. Finally, as with last semester, all groups answered the question posed on the action card as it applied to their particular agency. This worked well, except we did not have time to share and compare each agency's response. When I tried to share all of the groups' responses, other groups would quickly start working on their next strategy. This could have been a response to the large room or the students' learning styles.

I added more risk-taking elements to the game through the cards and the amenities. I doubled the number of amenities and conducted two separate auctions to keep the students' energy level high. I also changed the programming aspect of the game since our new textbook did not emphasize this topic. Students had to create a program or special event for their agency, but instead of focusing specifically on the elements of programming, I gave students the task of creating an advertisement or marketing campaign to promote their program or special event. Students had two days to put their campaign together and then present it to the class. In the future, I will keep this element, but I will give the students more time to create their campaign. Only one group designed and presented a creative campaign. The other groups simply told us what they were going to do.

Finally, the debriefing session occurred on the final day of play. I allowed time for students to write individually, and then we discussed the game as a group. The debriefing session lasted the entire 50 minutes and some students were more talkative than others. I modeled the debriefing assignment after the articulated learning worksheet used in the service-learning program. My goal was to get students' reactions, feedback, and comments on what they learned from the game itself by connecting the experience with the reflection.

Data Collection

Three sources of data were used in this study: (a) Students' reflection assignments, (b) my reflection journal; and (c) two peer observers' feedback. The first source of data was students' reflection assignments. All students in the course completed a reflection assignment after the game was played (Appendix B). The basic task for this assignment asked students to "Describe your experience being a student in this class this semester." This reflection assignment was part of the students' regular coursework and counted as their final homework assignment. The assignment was not graded, but I recorded students' names to determine who completed the assignment and who did not. The assignment was not read for content until after the final grades were submitted. Using this approach, I could not be influenced by students' reactions to the learning environment when calculating final grades. Students' names were removed from the data during analysis to ensure confidentiality. Any identifying information will not be revealed in any future publications or presentations.

The second source of data came from my personal reflection journal. Using close observation techniques, I systematically recorded my observations, thoughts, feelings, reactions and behaviors after every class session. Close observation is a method in phenomenological design where the researcher is actively involved in the setting while describing the situation as both a participant and a reflective observer (van Manen, 1990). Close observation is similar to participant observation; however, van Manen (1990) clarifies:

"Close observation involves an attitude of assuming a relation that is as close as possible while retaining a hermeneutic alertness to situations that allows us to constantly step back and reflect on the meaning of those situations...The method of close observation requires that one be a participant and an observer

at the same time, that one maintains a certain orientation of reflectivity while guarding against the more manipulative and artificial attitude that a reflective attitude tends to insert in a social situation and relation” (p. 69).

I noticed that I recorded my entries based upon two roles: teacher and researcher. Entries were kept related to every detail including attendance, my feelings, interactions with students, and the weather. As the semester progressed, my observations became more detailed and reflective. The last six entries contained information about the game, since those were the only days we played. On the last entry, I had written 45 single spaced pages of thoughts and reactions about the semester.

Finally, the third source of data came from two peer observers’ reflections and observations of the game. Their role was strictly to observe, not to interact. To desensitize the students to their presence, one peer observer sat in on several classes throughout the semester prior to the game. Peer observers were asked to record their observations both objectively and subjectively using the same layout for data collection. I waited until final grades were recorded before I discussed any observations with the peer observers.

On the last day of class, students received a consent letter asking permission to use their responses for research purposes (Appendix C). Confidentiality was ensured. Students who did not give consent were not used in the study. Their reflection assignments were not used during the analysis of data. Students were not informed of the study until the last day of class so as to avoid bias in the research design. If students knew too much about the purpose of the game for research, then serious reliability and validity flaws would have been introduced into the research design, including, but not limited to the Hawthorne Effect, selection bias, evaluation apprehension, class effects, control awareness, and attrition. The

purpose was to understand their perceptions of a game in a classroom environment. Using the qualitative research paradigm and phenomenology as the theoretical framework, the study needed to occur in a natural environment (i.e. the classroom) that had not been experimentally manipulated in any way to ensure true reactions and responses from the participants (van Manen, 1990).

The purpose of this chapter was to discuss the research methods for this study. The next chapter will present all of the findings from a phenomenological frame of reference. Using quotes from the students' reflection assignments and excerpts from my reflection journal, the next chapter includes both the findings and my interpretations of the data.

CHAPTER 4

FINDINGS AND INTERPRETATIONS

The purpose of this study was to describe and interpret students' perceptions and experiences in a learning environment that included a game as a teaching and learning tool.

The three research questions for this study were:

1. What are college students' perceptions and experiences in a classroom environment that includes an educational game for teaching and learning?
2. How is students' learning influenced by an educational game in the classroom?
3. How does a learning environment change when an educational game is introduced?

In this study, both the empirical and reflective methods of phenomenological research were employed. Open, axial, and selective coding was used on textual data gathered from the students' reflection assignment, my research journal, and feedback from the peer observers.

Description of Participants

The participants in this study were students enrolled in an introductory Parks, Recreation and Tourism Management (PRTM) course during the Spring 2005 semester at North Carolina State University. The course was required for all PRTM majors; however, it could be taken as a general education elective by non-majors or for those deciding whether or not to transfer into the major. Thirty-two participants were in this study including 13 female students and 19 male students. There were 20 PRTM majors and 12 non-majors. Non-majors were categorized as those students who had not officially declared PRTM as their major prior to enrolling in the course. There were eight freshmen, 13 sophomores, nine juniors, and two special/lifelong education students. No students were under the age of 18,

and all of them were traditional age college students, meaning they were between the ages of 18-24.

Thirty-one students gave consent for their feedback to be used in this study. One student did not attend the final day of class, did not complete a consent form, and did not turn in a final exam. Efforts to contact this student were unsuccessful. I made the decision not to use this student's feedback since consent could not be determined. Another student received an incomplete in the course due to personal circumstances. Although she gave consent, I chose not to use her feedback since coursework had not been completed by the time I analyzed my data. The final number of participants was 30.

Analysis of Codes and Themes

First, data were coded to illustrate common themes from the overall classroom experience as a whole. I coded all of the reflection assignments, my research journal, and the peer observers' feedback, but I did not specifically look for a theme or phenomenon. In accordance with phenomenology's reduction technique, I remained open and flexible, setting aside my preconceived notions about prior classroom experiences (van Manen, 1990). I needed to see what emerged from the data without trying to fit my data into an existing theory or framework (Henderson, 1991).

Then I used open, axial, and selective coding techniques combined with van Manen's (1990) selective and detailed approaches for isolating themes in phenomenological studies. Initial data analysis revealed 173 codes. These codes were further analyzed, defined, and then merged based upon similar themes. The six major themes, listed from most to least frequently mentioned, were:

1. **Environment:** Included all references to the learning environment and setting.
2. **Activity:** Included all of the different activities and games in the course, including Leisureopoly. Leisureopoly was the most frequently mentioned activity.
3. **Student Characteristics:** Included all of the descriptive characteristics of the students including their attitudes, personalities, behaviors, and backgrounds. Most of these descriptions were from my journal, although some students mentioned these characteristics in their reflections.
4. **Knowledge:** Included descriptions of what students learned academically, personally, and professionally.
5. **Instructor Characteristics:** Included all of the descriptive characteristics of the instructor including my attitude, personality, behavior, and background. Most of these descriptions were from the students' reflection assignments.
6. **Structure:** Included all references to the overall structure of the course including the attendance policy (attendance, tardiness, and absences) and assignments (homework, exams, and in-class assignments).

These observations were based on this particular learning environment at that specific point in time. Student responses commonly overlapped into several of these themes, illustrating that these themes are inter-related and contextual. Phenomenology recognizes the interconnectedness of people's experiences. Trying to divide students' perceptions and experiences into themes and categories seems artificial, but it is necessary in trying to understand a phenomenon as complex as human behavior. Each theme is discussed and analyzed in the following sections.

The next part of chapter four is divided into five major sections. Section I is an analysis of all of the major themes, or findings, based upon all of the data. Section II is an analysis of the Leisureopoly game. Section III is a more detailed analysis of the themes as they specifically relate to the research questions. Section IV is a discussion of my reflections on the “big picture” of the overall learning environment in this class. Finally, Section V is a discussion of the limitations of this study.

FINDINGS SECTION I: ANALYSIS OF MAJOR THEMES

This section discusses all of the major themes that emerged from the data analysis and is designed to give a general overview of the classroom experience as a whole. These themes are supported by evidence from the students’ reflection assignments and my research journal. This section is designed to give a general overview of the classroom experience as a whole.

Analysis of Theme #1: Environment

When students were asked to describe their experience in this class, most of their responses centered on the environment or atmosphere of the classroom. As I studied the data more intently, three sub-themes emerged from the students’ responses. Students described the learning environment as (1) interactive and personal, (2) unique and different, and (3) fun. Each of these sub-themes are discussed below:

1. Interactive & Personal: Group work created a relaxed, interactive environment where students were encouraged to share ideas and create friendships. Students consistently mentioned all of the different group activities and discussions. Working in groups or pairs allowed the students to meet each other and work together to learn from someone else’s point-of-view. One student commented:

I really like the way we split into smaller groups to work on exercises or questions dealing with the subjects of the day. Discussing these subjects in small groups is easier for me because I'm usually shy but in a smaller group I can speak more with my opinions and therefore get more out of the discussions. I actually enjoyed the group activities we did. I got a lot more out of the class by actually doing activities rather than simply taking notes from the lecture like it usually is in other classes. It also gives me an opportunity to get to know other people and to listen to their opinions.

Establishing friendships, which seemed to be an important goal for these students, must not have been a priority in some of their prior classroom experiences. This student explained:

When we did have a lecture we would always have some sort of group discussion which I believe helps more than anything because when you get to talk to other people in the room you get to see what they have to say about the subject. Also it was a good way to meet people. I have become pretty good friends with a few people in the class and it is because of the group discussions that we always had. I cannot say that for my other classes.

Finally, the comments from an experienced college student discussed the importance of working with others and making friends through the design of learning environment:

Overall, this was one of my favorite classes that I have taken at NC State, and I have been here for four years. The open and interactive atmosphere helped me to excel in this class. Not only did I learn a lot, but I also made many

friends. I will remember this class, and the things that I learned for many years. I believe this class will help me in all of my classes from now on.

Students appreciated the opportunity to work with others in class. They perceived this type of environment as less risky and stressful since they were able to discuss their opinions with their peers before we discussed ideas as a whole class. I intentionally designed group activities to help students meet each other and make new friends, hopefully creating a more open and relaxed learning environment. This is one of the first steps in creating community in a classroom. From past experience, I knew that if we did not create community within our classroom, then the Leisureopoly game would not be as successful.

2. Unique & Different: This type of interactive learning environment appeared to be atypical of most college classrooms based on these students' experiences. Several students commented that the class was different than anything they had experienced in other college classrooms. For many students, this was a positive characteristic of the class. One student stated:

What I liked most about the class was that it was not a typical college class where you take many notes, read numerous power point presentations, and take exams. This class was really based on hands on discussions activities. I feel like this is the best way for [me] to learn.

Another student explained:

The reason that [this] class is so unique from other classes is because half of the time we are participating in activities that require us to pair up with others, get out of our seats, or have presentations in front of the class.

However, not all students enjoyed this type of interactive learning environment immediately. One student initially rejected this interactive environment, but then realized he could benefit from this unique approach to learning:

The style of learning that I encountered in PRT 152 was unlike any I have ever seen in college. I think that it was a positive experience for me, however not every student would necessarily benefit from it. Some students learn better through a more structured class format with lecturing and note-taking. They might place more value on the stability of an organized, set routine. I felt this class was a refreshing break from the monotony of lectures and looked forward to it on a daily basis.

Most students in this class appreciated the unique learning environment I created. A couple of students were uncomfortable and confused about their role in this new type of learning environment, and they needed time to understand how to adapt to this new classroom environment.

3. Fun: Many students described the learning environment as fun, especially when referring to the games and activities they participated in throughout the semester.

One student explained:

It was fun being a student in this class because of the games and the projects and all of the other stuff we did. I really learned a lot and I think because of the different teaching style and the games and the different approach to theories made the subject matter much easier to understand and grasp.

Another student stated:

This class has been the best thing for me. It brought the fun back to school.

And finally, another student wrote:

I think that because [the instructor] made the class so interactive we learned a lot more because we were having fun so it did not feel like school.

Both of these last two statements were written by freshmen. The idea that this type of learning environment “brought the fun back to school” is an interesting concept. It is possible a learning environment has the power to change students’ attitudes about education. Establishing a learning environment that creates community, values personal relationships, and adds fun to the learning process might be one of the most important ways to help students re-think their traditional roles and assumptions about what it means to be in school.

This analysis provided a general overview of the students’ descriptions of their perceptions of the learning environment. Students described the overall learning environment as interactive, personal, unique, different, and fun. They appreciated the different approaches to teaching and learning in the classroom. The learning environment included everything that occurred within the classroom; however, for this section of analysis, I decided to include the overarching themes instead of the specific details related to the game. Leisureopoly’s influence on the learning environment is explored further in the next few paragraphs and in Sections II and III.

Analysis of Theme #2: Activity

I intentionally designed the course around a series of activities where students could apply their knowledge and integrate course concepts on a regular basis. The “Activity” theme included any active learning technique used in the class. This theme emerged in every student’s reflection assignment. Students recalled at least one activity and explained what

they learned from it. Leisureopoly was only one of the many activities we participated in, but it seemed to be the most memorable. Twenty-nine of the thirty students mentioned Leisureopoly in their reflection assignment. The sub-themes that emerged from the students' reflections about activities, specifically Leisureopoly, were: (1) realistic, (2) fun, (3) competitive, and (4) different.

1. Realistic: The college students in this class were particularly interested in “real world” activities and experiences. They were eager to apply the academic concepts to a realistic setting. Leisureopoly gave them this experience, and they seemed appreciative of the chance to test their skills. One student commented:

My favorite part about the class was the game Leisureopoly that we played the last 2 weeks of class. We were able to take all the information that we had learned all year long and apply it to our business that we were supposed to be running. It gave us the opportunity to get a feel of what it is like running a business in the real world.

One student connected the game's skills to those she would need in a job:

[Leisureopoly] get[s] the whole class to review all the concepts we've learned over the semester, while also getting us to practice some of the thinking skills we'll need on the job after we graduate.

These college students were seeking more from their classroom activities than just something to do. They wanted to know that the skills and activities they participated in had a purpose beyond just another classroom exercise. Leisureopoly was one of the most realistic activities they participated in, and it gave them the opportunity to simulate professional roles and responsibilities. Students who made the connections from the

classroom to the real world appeared to be more interested and involved in the game and in the learning environment as a whole.

2. Fun: Again, “fun” emerged as a popular comment when students described their experience with the class activities and Leisureopoly. This student’s comments suggest the game had an influence over her decision to pursue PRTM as her major and helped her identify one of her strengths. She stated:

The most fun activity I’ve done in this class is Leisureopoly. It was so much fun to be able to get creative with this game. It also showed me a piece of what my job could entail. I think playing Leisureopoly really sealed the deal for picking PRT as my major. I learned that I’m a lot more creative than I thought I was.

Another student seemed to appreciate the game as a fun way to reflect on the end of the semester and apply what he learned. He explained:

Leisureopoly is one of the greatest games/tools that have ever been invented. That was such a good way to reflect back on the course and in a fun way and how to use your tools to be successful in the PRT industry. It was so much more than your basic last two weeks of the semester.

Many students have assumptions about how school should be, and “fun” is not a word that used often to describe college classrooms. Some students thought the games were silly at first, but they soon realized the purpose and appreciated the attempt to make learning fun. In the end, students reported that they learned more with the fun activities than they did through lectures and notes.

3. Competitive: Within the game, opportunities existed for students to be cooperative and competitive at the same time. These students worked cooperatively in groups with their peers, but they mostly seemed to enjoy the competition with other groups. They thrived in the competitive atmosphere the game brought to the classroom. One student stated:

Out of everything we did this semester, I enjoyed Leisureopoly the most. It provided a real sense of competition and financial management. I got to learn how different organizations work and what drives them.

Another student commented:

My favorite was definitely the Leisureopoly. I liked that the most because I was able to be competitive.

Competition motivated some students to get more involved in the game so they could win. Students consistently mentioned how they enjoyed competition, and their questions in class centered on how to win the game. The idea of “winning” seemed to be important in this type of environment and will be discussed further in Section III.

4. Different: The game provided a unique classroom experience for the students. They understood the connections between the purpose of the game and the content of the course, and they enjoyed a new way of learning in the classroom. One student commented:

I also enjoy participating in the “Leisureopoly” game. It is something fun that is not traditional and I think it is enjoyable to the whole class while we still learn.

Another student explained:

This game by far was totally different than anything else that I have ever done in any of my other classes, but it was very effective in getting its point across while letting the students have fun and enjoy class at the same time.

Students enjoyed the in-class activities, and they indicated their favorite activity was Leisureopoly. For some, the uniqueness of such an activity in a classroom provided a new, and fun, way of thinking about their education. Others appreciated the opportunity to apply their new knowledge to real world settings. The game had some type of influence on every student's perception of and experience in the learning environment. This will be explored further in Sections II and III.

Analysis of Theme #3: Student Characteristics

Attitudes, personalities, and behaviors affect any environment and have an impact on the potential for establishing relationships (Moos, 1979; Rogers, 1969). The classroom environment is no different. It is susceptible to students' personalities and behaviors, and these attitudes have an influence on the overall learning environment. In this class, there was a sharp distinction between those who wanted to succeed and those who appeared not to care. I struggled with these conflicting attitudes throughout the semester and recorded my thoughts in my journal. I never had such a large group of students in one class who were so admittedly unmotivated and unwilling to try. My observations of these students' attitudes, personalities, and behaviors clearly emphasized the problems I was having connecting with them early on in the semester. I was surprised how influential students' personalities were on the feel of a learning environment.

I wrote the following journal entry three weeks into the semester. Students had just completed their personal time journal assignment. This purpose of this assignment was for

students to record and analyze everything they did for seven consecutive days to determine how they spend their time. At this point in the semester, the students were still new to me, but it was obvious that the students' attitudes, personalities, and behaviors were having a negative influence on the learning environment. In my reflection journal, I wrote:

This is not an observation from class, but an observation from reading their reflection papers that I think may have an impact upon why I cannot seem to connect with the students in this class. I have read at least 5 papers where the students seem to be “disconnected”, “sad” “lonely” or even “lethargic”. They admit to their laziness and almost embrace it. They admit to being procrastinators and slackers when it comes to their school work, yet they do not offer any solutions to try and change it. They seem to either accept these limits, or they don't know any other way to exist. I've never read journals that were so “negative” about life and leisure and recreation. It's almost as if these students don't want to try to change even though the way they are living is not working for them personally or academically. One paper reads, “Nothing exciting ever happens to me and I don't make an effort to do anything exiting”. The paper continues, “I don't have many friends here”; “I have plenty of time, I just don't have the motivation or drive to do anything productive”; “I don't ever feel a sense of accomplishment”. These observations all came from one paper, but it was during the process of reading it that all of the other ones I read seemed to make sense. Obviously, these types of emotions and feelings are spilling over into the classroom, and maybe that is why I am having such a hard time getting this class to get with

it. Now, there is still a large group of students in this class who are great and willing to work hard and stay dedicated to their studies. But I can definitely tell the influence of the more negative personalities. Maybe nothing I do to enhance the learning environment will work if they are carrying around this type of negativity and apathy.

My observations revealed the frustrations and personal struggles of working with students who appeared unwilling to try. Approximately half of the students in this class did not seem to have the motivation or desire to participate. My opinions about these students were not just my observations. Students openly wrote about their feelings and attitudes towards school in their time journals and in their reflection assignments. For example, this student admitted his laziness and problems with procrastination:

[The time journal assignment] showed me that I needed to get my act together and stop being so lazy. I just didn't like how I got punished for turning it in late and also being absent from class. I turned that assignment in on the same day just a couple of hours late because I was up all night working on it and by the time I woke up it was too late for class.

Another student admitted he did not care about being on time or participating in class until it was too late in the semester:

It was not out of disrespect, it was the simple fact that I could not get out of bed every morning at 10 o'clock. . .I didn't really care earlier in the semester but started trying to be on time midway through the semester but it was too late.

One student described the difficulty transferring from one department to another. He compares his former department to PRTM:

My teachers [in PRTM] actually cared if I was in class or not. It was a rough transition sometimes because of unfortunate circumstances but mostly because of my disorganization and irresponsibility.

Not all of the students in this class were as unmotivated and lacking in focus. Many talented students attended class regularly and participated in all of the activities and assignments. Students described how the design of the class environment motivated them to want to attend class. One student said:

The different activities leave the students wondering what we will do in the next class and that drives us to want to attend as opposed to the standard repetitive lecture.

Another student enjoyed the class, and the fun atmosphere provided the motivation he needed to attend class:

PRT 152 was flat out fun. There was never a time when I woke up and thought damn I really don't want to go to this class today.

I tried to create a learning environment where students wanted to attend class and participate in the activities. Those who were already interested in the subject and motivated to attend class appreciated the creative atmosphere. Those who were unmotivated did not appear to change their ways regardless of the classroom environment.

Analysis of Theme #4: Knowledge

Another major theme throughout the students' reflections was knowledge, or what

students learned. Students discussed what they learned, how they learned it, and what it meant to them for the future. Three categories of knowledge emerged: academic, personal, and professional. Academic knowledge refers to the definitions, theories, and concepts related to the course material. Personal knowledge refers to the ways in which students learned more about themselves and their behaviors, attitudes, and values. Professional knowledge refers to the skills and abilities needed to succeed as a professional in the field, or real world. Both types of knowledge were embedded throughout the course, with specific emphasis on applying the academic course material to realistic situations students might encounter as future professionals. One student explained:

Each day in 152 we did something interactive that taught us the theories and concepts we had to learn from the textbook. Looking back on the semester I see that the purpose of all the activities we participated in were to teach students what we needed to know about the basics of PRT while demonstrating to us that careers in this major require hands on and creative skills.

Another student expressed similar thoughts and explained how reflection was an important part of her experience in the class:

Another positive aspect of PRT 152 is that not only do you just learn different ideas and theories but you are able to reflect on them. After each class there is always a time to sit and reflect on how what was learned that day will help you or how you will be able to use it in the world of Parks, Recreation and Tourism in your future.

Another student expressed her understanding of both academic and professional knowledge. She commented:

Instead of just opening the book and taking down notes, we did exactly what our future parks and recreation patrons would want to be doing. Through these activities we learned everything we could from the books, as well as how those concepts are applied and followed through.

Not all students learned as much as they would have liked. I found that many students were conscious about money. They were very concerned with salaries and career potential rather than doing something they enjoy. One student wrote:

Some of the things I wish I knew a little bit better was like how much money a certain job made. I know a lot of them would be fun to do but would it be worth my time? I have just heard different things about the jobs that I could possibly go into and how much money that they make.

In this introductory course, I paid careful attention to balance the academic, personal, and professional knowledge. Students were eager to apply the academic knowledge they gained from the book to real world knowledge gained from hands-on activities. They appreciated learning about the types of career options they could explore once they graduate.

One sub-theme in both the Student Characteristics theme and the Knowledge theme was money. Students were very concerned about money, and they wanted to make sure the time they dedicate to something would be worth the reward. Even the “fake money” used during the Leisureopoly game changed the behaviors of students. As an incentive, I offered the chance for students to earn extra money for their agency if they arrived to class on time. At first, students thought it was funny that they could earn money just by being on time, but I

noticed that the number of students who were on time increased during the two weeks we played the game. They felt like their attendance had a direct influence over whether or not their group would win the game. Students did not want to let their group members down by costing their agency bonus money.

The relationship and concern over money was an interesting issue in this class that affected students' behaviors, motivation, and decisions about their future career in this field. This finding provides insight into the decisions students in introductory courses make when choosing a major. Younger college students may be more focused on society-induced pressures (money, materialistic goods, and prestige) than on pursuing their personal passions and interests.

Analysis of Theme #5: Instructor Characteristics

The instructor plays a critical role in creating a supportive learning environment (Moos, 1979; Rogers, 1969). My teaching style, personality, attitude, and behavior affected the learning environment and overall classroom community just as much as the students' characteristics. In reviewing the students' reflection assignments, three general sub-themes emerged from the students' descriptions of my teaching style: (1) enthusiasm, (2) personal contact, and (3) professional knowledge. These three sub-themes are discussed below:

1. Enthusiasm: I love teaching this introductory course. I always came to class in a good mood and made efforts to talk to individual students before class. Although I was frustrated with attendance and endless excuses on some days, I did not bring my frustrations to the classroom. I made every effort to approach the day's lesson with enthusiasm and energy, hoping to motivate and inspire students to do the same. One student commented:

I've never in my life been taught to the way my teacher taught to me in this class. I have never seen so much enthusiasm for teaching the way I saw in this class. I wish this class was longer so that I could have learned more and had more fun.

Another student explained how my skills led to a more relaxed environment where students *wanted* to learn:

This course in PRT is also great not only because of how things are done, but because of the leadership skills of the teacher. A teacher is the pivotal point of a course, and can either make it or break it. As a student, who sits through quite a few long and boring lecture courses, the teacher of this course was excellent at leading the course, by showing interpersonal cooperation and enthusiasm for the course, with creativity just overflowing every day of class. Those qualities in a teacher allow the students to feel more at ease, comfortable, and interested in the class and its material.

Students look to the instructor to set the tone and establish expectations for the class. The combination of the instructor's characteristics and the learning environment helps students understand what is expected and what their role is in the classroom.

2. Personal contact: Establishing a relationship with me was important for these students. They wanted an instructor who knew their names and interests and put students first. One student wrote:

This was great to have an instructor who didn't make us feel like the class was all about them and what they know. [Our instructor] truly urged [us] to

interact with the students and learn from them as well as have them learn from her. Having an instructor who wants to be there and is excited about what they are teaching makes the biggest difference in the learning process for me.

Another student appreciated the personal interaction:

I also liked that she was involved in class and did not stay at the front of the class. She came around and made sure she knew who you were and knew you on a personal level instead of some number in the class.

3. Professional knowledge: Professors are scholars and researchers, and they must be knowledgeable about their field. I sometimes used my own personal experiences to explain course concepts. I noticed students listened and seemed more attentive when I described my personal experiences working in the field. One student wrote:

I loved to hear [the instructor's] own stories of her successes. Those showed me exactly how these things worked for her. It really put things in perspective when you see these things in a book then put to real life issues and them working.

An instructor sets the tone for a learning environment. These undergraduate students needed the personal connection with me to help them establish community within the classroom. They appreciated my ability to relate to them on a personal level, but they also looked for someone who knew the profession. Again, it was apparent that they wanted to learn about life outside of the textbook. For some of these students, my enthusiasm and energy kept them interested and excited about the course and the major. I always hope to inspire my students to be creative and find their passion. One student must have understood

my intentions. She wrote, “I love [the] passion that [the instructor] has; it stirs a desire in her students to want to find that same passion in their own lives and careers.” I knew I had an influence on my students, but I never realized how much they turn to me as the leader in the classroom.

Analysis of Theme #6: Structure

The final theme in the overall learning environment was structure. Structure included any references to classroom management issues such as attendance, tardiness, homework, exams, and in-class assignments. At first, I was surprised to see “Structure” emerge as one of the major themes for this study. Then I realized that I had observed consistent problems with attendance, tardiness, and attentiveness for half of the students in this class. I had a strict attendance policy, and I wondered if the students were trying to test me or rebel against it. Regardless, “attendance” was a frequent sub-theme throughout my journal and the students’ reflections. In my journal, I wrote:

Here we go again. Seven people were absent today. Five people were more than 10 minutes late today. It was a dreary, rainy day, but. . .if I have to be here, so should they. I am at my wits end with some of the students in this class. I do not understand why they can’t get to class and why they can’t get here on time. . . I cannot believe what a hard time I am having getting these students to get to class. I am frustrated.

To add to my frustration, nine students were absent in the next class session. In my journal entry for that day, I explained how I had implemented a new class policy where I locked the doors when class began. I emailed the students to inform them of this new policy, and the following week, I wrote:

There were only 3 students absent today. Everyone was on time. Maybe my firm actions did work for this group. I thought it would change the learning environment to be more negative, but they seemed to listen and take me seriously. Maybe this group just needs more firm rules and actions.

Students also commented on the attendance policy. They felt they should be able to decide whether or not to attend class. One student wrote:

Minor details such as attendance policy may have been my only pet peeve. I feel that as sophomores and above, at this age in our lives we should be able to decide whether or not to come to class, and if we miss it unexcused then we shall reap what consequences come.

Another student, who had consistent problems with attendance and tardiness, did not appreciate how attendance affected his final grade. He wrote:

I didn't like the fact that we weren't allowed to miss a couple more days. I also don't like how its five points off your grade after the third absence. I tried my best to make it to class every day, but sometimes things happened and I wasn't able to make it.

Some students demonstrated in their reflections that they understood how important attendance was in this class. One student explained:

It is participation and class contribution being graded, not scan-tron tests and research papers. I believe some students in the class had trouble with this concept. Many students have a preconceived notion that classes with more than 30 students, especially 100 level classes, are the ones to skip. Maybe some are, but not PRT classes.

Getting students to attend class was the most challenging part of the course this semester. Students always talked about how much they enjoyed interacting with one another and doing creative activities, but then they would not attend class. I was frustrated spending time designing activities only to have one-third of the students come to class. They were frustrated that I kept accurate records of their attendance and made them take responsibility for it.

Another part of “Structure” included homework, exams, and in-class assignments. I created unique assignments that seemed to have an impact on the students’ experience and perceptions in the class. I was surprised to see how many students mentioned the class assignments and exams in their reflections. The assignments and exams were designed to test students on academic, personal, and professional knowledge. Students were given the opportunity to personally reflect on the course content and how it can be applied in the profession. They had more freedom to explore their own interests, and most students appreciated the opportunity to apply their knowledge in their own way. One student wrote:

Aside from games and activities, another thing that I liked a lot about this course is that the midterm and final were tests of our real knowledge and thoughts, and not just another run-of-the-mill standardized test based on how well we can memorize information from a review session.

Another student made similar comments about how the assignments were tests of students’ knowledge and creativity:

The mid-term was really good in making us apply what we had learned so far in the semester. The papers allowed us to show what we had learned in a creative way instead of trying to remember them for a multiple-choice test.

Another student had an interesting perspective about the coursework. The assignments allowed her to learn about herself personally and professionally:

[A]ll of the assignments in this class have a purpose, either to help you learn something about yourself, or to teach you about the PRTM industry.

Only one student expressed concern about the design of the midterm exam. He did not do well with an open-ended format that tested his ability to apply the course material. He did not appreciate the risk involved in having many correct approaches to answer a question. This student might need more structured assignments with clear correct and incorrect answers. He wrote:

There were few things I disliked about the class but one was the midterm. I felt it was too general and had too many opportunities to make a mistake. The class average actually was high but I performed poorly and was well below that mark, probably making one of the lower grades in the class.

The structure of the classroom impacted students' perceptions and experiences of the learning environment. Some students resented the strict attendance policy in a college classroom, while others understood the importance of attendance for participation and in-class activities. Students appreciated creative assignments that were designed to test their ability to apply academic concepts. They enjoyed the opportunities to explore and integrate their own interests into their exams rather than using a standardized test. The Time Journal Assignment had more influence than I realized (Appendix D). These students seemed to appreciate an assignment that connected their personal lives to the academic content. Overall, students seemed to resent the strictly enforced attendance policy, but they enjoyed

the open-ended, flexible assignments and exams were designed to assess retention and application.

This section discussed all of the major themes that emerged from the data analysis. The six themes I found were: (1) environment, (2) activity, (3) student characteristics, (4) knowledge, (5) instructor characteristics, and (6) structure. Each of these themes was defined and analyzed using students' reflections and my personal reflection journal. In the next two sections of this chapter, I will analyze and discuss findings related to the Leisureopoly game and the specific research questions for this study.

FINDINGS SECTION II: ANALYSIS OF THE LEISUREOPOLY GAME

The purpose of Section II is to describe and analyze what happened during the two weeks we played Leisureopoly in class. The details and overall design of the game were explained in chapter three. This section is an overview of some of the most important comments and observations from the students, the peer observers, and comments in my reflection journal.

Introducing Leisureopoly

Introducing Leisureopoly to a new group of students is always a challenge. I try to create excitement and help students understand their role within this new teaching and learning experience. Most students get excited about the opportunity to do something new and different. I recorded the following entry in my journal after I introduced Leisureopoly to the class:

I told the students that the class was theirs now...I said am turning it over to you. You are the ones who decide how creative to get with the game and with class for the rest of the semester. I specifically saw [one student] smile and

nod and he seemed to be excited about the prospect of having control of the class.

Before we started playing the game, I had placed students in groups based upon their personal and professional interests. Students had completed a reflection assignment earlier in the week explaining the two types of leisure service organization they felt they best “fit” based upon their values, beliefs, and career goals. My intention was to put the students’ interests first, hoping it would motivate them to become more involved in the game. For most students, this approach worked. One student wrote:

I also think that letting us choose which group we wanted to play Leisureopoly with really helped since that was the group we were most interested in. I really like when activities are specialized for certain groups because it made it a more valuable experience. You put a lot more time and effort into the things that you are most interested in, and I really paid a lot more attention since I wanted to learn more about it.

I gave the students the responsibility of deciding which area of the leisure service profession they were most interested in. Placing the students’ interests at the center of the game before we started playing set the tone for how the course was suddenly based solely on their actions from that point forward. The student who wrote this reflection clearly indicated she was more motivated to learn and put more effort into the experience since she was in a group that represented her interests.

Before we began actually playing the game, groups established their agencies. I told the students that the first task was to determine the roles and responsibilities of each group member. Then, they had to create a mission statement and determine how their type of

agency was funded. When I stopped giving directions, I let the students have time to complete these tasks. I was stunned by what happened next. Students just sat there quietly and looked at each other. I suddenly realized that they did not know where to begin because they did not know their group members. I had never had this problem before. In my journal I wrote:

I had to tell students to introduce themselves to each other because so many of them didn't know anyone else in the class other than the people they usually sit beside. This is also different from other classes who have played before because usually by now, most of the students know everybody else in class. [I'm] not sure yet how this might affect the game.

The peer observer noticed the same problem on the first day of the game. She wrote:

Students [began by] introducing themselves to each other...there would be one or two members of groups actively working on their [mission statements], while others were sitting off in their own worlds. And a few moments later, she added, "[There is] an odd silence in the room. Are they really doing their mission statements?"

I thought I had built up enough classroom community so students already knew each other. It was shocking to realize students still did not know each other's names after all of the activities we participated in and all of the group discussions we had during the semester. Each student had worked with every other student in class on assignments, activities, and reflections, yet they could not remember who their classmates were. I had not established community in my classroom. Everything I had worked so hard to design did not happen with this group of students.

Playing Leisureopoly

Once students knew each other and established their agency's mission statement and goals, I began the game by auctioning the amenities. The auction always gets everyone excited and noisy, and this class was no exception. The beginning was slow, but once they understood the purpose and competitiveness of the auction, students eagerly placed bids on amenities and began building their organizations. The peer observer wrote:

After the first auction, [there was] lots of discussion, especially about how much [money] was spent. The first auction went fast...[There was] some confusion at the speed of the auction, but I think this was good – it made some of the groups pay closer attention to what was going on.

Everyone was involved in the purchasing decisions except for a couple of students who were completely disengaged from their groups. These students had not been engaged all semester and the gaming environment did not initially change their behavior. One student consistently arrived late to class all semester. He was late to class on the first day of the game, and he made mistakes that led to confusion in his group. The peer observer watched this particular group carefully and noticed:

[The Sports Complex Agency had discussions about] how much they are willing to pay – [they were] missing out on bids. One member of the group who was not designated as the group speaker kept bidding. [They are] also very confident about their ability to win money. As soon as [they] decided what they were going to bid, the auction was over. It was amusing, given the apparent sureness that they would be able to get everything they wanted at the

beginning of the auction. The member of the group who was bidding out of turn was the student who came in late.

Some of the students in this group had been disengaged all semester, and their actions during the game were not surprising. This was the only group who did not purchase any of the amenities on the first day of Leisureopoly. This group may have wanted to take the game seriously, but their lack of initiative and sluggish attitudes seemed to carry over into the game. Only one student in this group had been engaged throughout the semester, and I had hoped his initiative would motivate the group to work more cohesively together. On day one, this did not happen.

At the conclusion of the auction, I explained the format of playing the game which involved rolling the die, purchasing and trading amenities, and answering the questions on the action cards. I explained the concept of the “power of the die” which meant that the group who has the die was the one with the power to “do business” by purchasing more amenities and coordinating trades with other agencies. I made these observations in my journal:

What is usually a fun part of the game was awkward with this group. I tossed the die to someone in the group, and they would keep their hands down and just watch it fall to the floor. It's like they didn't care or didn't want to roll or whatever. Usually groups are all excited to roll because I hype up the “power of the die”.

Students were not assertive when they first started playing Leisureopoly on the second day of the game. I am not sure if they were unclear of their role in this new environment or if they did not care. The auction had piqued their interest and curiosity, but

now they had to figure out how to actually play the game and answer the questions about their agency. The peer observer noticed this change also. She commented:

Students didn't take time to gather their thoughts and [the instructor] had to tell them [what they should do] again. [There is a] learning curve in terms of them [the students] taking responsibility for what they needed to be doing.

Students may have been apprehensive about this new part of the game, and they had to learn what was expected of them. The game started slowly; however, as soon as the first group rolled and the first question was posed to all of the agencies, something in the learning environment began to change. I wrote these comments in my journal:

[The first group] rolled a 2 for a Community Voice card. The question was about graffiti on buildings. I explained what to do and then something interesting happened in the classroom. . .The students TALKED to each other! The students who seem to be quiet and disinterested were actually talking and planning and thinking about what the question was and how it applied to their agency.

As the game progressed, I noticed how the students became increasingly engaged and talkative. The peer observer frequently described the students as “actively engaged,” “on task,” and “all a buzz” as we continued to play the game. As the questions were asked, students immediately started working on their responses before I could finish reading the question and giving directions. Most of the students were eager to work together in their groups to figure out how apply the academic content to their particular agency. The two students who were completely disengaged at the beginning of the game began to help their groups make decisions.

I added a new element to the game this semester to increase risk and reward those who could recall what they had learned in class. Groups had to pay \$25,000 if they wanted to use their notes to answer the questions on the action cards. Some of the groups needed to refer to their notes, but others worked together to recall what they had learned. It was amazing to watch the students in the YMCA group in particular. They refused to use their notes and instead turned to each other's strengths to figure out how to respond to the question. One of the students in the YMCA group wrote:

I learned so much about non-profit organizations. In applying these organizations to real life situations, I was able to see for a short period of time how businesses are run and how I would want to do business, ethically. This was my favorite learning technique that we did.

Other groups were not as prepared for the answering questions and applying the course material to their agency. The State Tourism Department was probably the weakest group in terms of knowledge. One of the most academically successful students in class was in their group, but she admitted she was too shy to take the initiative and answer questions on her own. On the third day of playing the game, I wrote this journal entry (*pseudonym):

*I walked into class feeling excited to play because I thought the game was going pretty well after Wednesday's class. However, I left class today feeling frustrated with a few of the groups. The State Tourism Dept. group is completely and totally out of it, with the exception of [*Amy]. But [*Amy] is so quiet. She knows the answers, but she doesn't say anything. She doesn't speak up when I talk to the group. [Another student] tried to answer the questions for the group, and all he did was "uh" this, "uh" that and "um"*

everything and never really came up with an answer. I gave them extra time to work on the questions and tried to help them since this [is] a tough group, but they just didn't seem to get it.

The peer observer noticed the same confusion within the State Tourism Agency. She observed the group as I helped the students work to solve a problem posed on one of the action cards. While I was talking to them, they were attentive and nodded their heads as if they understood. However, the peer observer watched them more carefully and commented:

Students [in the State Tourism group] paid attention to [the instructor] but then they said "I didn't understand anything she just said" when [the instructor] walked away from the group.

I do not understand why the students in this group would sit there and act as if they understood my feedback when I was trying to help them answer the question. One of the group members was shy, and the other group members were usually not on task during class. It was evident that the students in this group were not working well together, nor were they willing to take a risk and try to solve problems on their own. This experience provided me with an opportunity to gather feedback on which students paid attention and understood course concepts from the semester.

Group interaction was an underlying theme of the game, and it was influential in determining how the game progressed. The YMCA group members consistently worked together to make decisions. Two people in the City Parks and Recreation Agency made decisions while their other group members sat back and interacted when they felt like it. The State Agency tried to do "just enough" to answer a question, sometimes costing them money for incorrect responses. All three of the commercial organizations were highly competitive

and strategic in making decisions. Other groups easily merged and worked together without problems and conflicts, and some groups did not. Groups interacted differently, and this illustrated how students' personalities, behaviors, and attitudes significantly influence the learning environment.

By the third and fourth days of playing Leisureopoly, students took more initiative and responsibility for their learning. They began to immerse themselves in the game as soon as they came into the classroom. I recorded this observation in my journal:

As I handed out the folders, the students immediately began setting up their signs and agencies without me having to tell them to. . .students started coming in and they started setting up. The room was quiet until about half the class arrived, and then the students began buzzing with noise about strategies.

The peer observer also noticed how the students took more responsibility. As the game progressed, she commented:

They [the students] took ownership of their learning...they [were able to] apply the material beyond the classroom. [This is a] major accomplishment of the game.

Students became more involved the longer we played the game. They were attentive and eager to design a strategy to defeat their competition. Maybe they had finally become comfortable with their role in the game. They seemed apprehensive in the beginning, but over time they adapted to the demands and responsibilities of this new learning environment. For many of the students, this teaching and learning strategy proved to be the most memorable and enjoyable activity they had ever participated in during their college experience.

On the last day of the game, I began class by asking each group to explain whether or not they had met their mission statement. All groups determined that they met their mission and were successful in the game. We discussed how it was possible for all groups to “win” the game even though their missions were different. As with most classes, the students were confused that there was not a clear winner. Finally, I gave the students time to individually rate the contributions of their group members towards helping them achieve their agency’s mission. After I collected their responses, I began the debriefing phase of the game.

After Leisureopoly

After we played Leisureopoly, I led the students in a reflection session. The purpose of this reflection session was to debrief what happened during the game and reflect on what students learned through this activity. I explained how Leisureopoly would not be what it is without feedback from students. I told them I took their comments seriously, and I appreciated their responses.

First, I handed out a worksheet that asked students to give feedback on what they learned and how the game could be improved. Then, I gave students time for individual reflection, and I told them to complete this worksheet on their own. The classroom was quiet and students worked intently on writing their responses. I do not think I allowed enough time for them to write their responses. Twenty minutes before class ended, I called everyone’s attention and we discussed the game as a whole class. I recorded my observations in my journal:

I sat on the desk at the front of the room so I would appear relaxed and approachable, hopefully getting honest reactions and feedback from them. I didn’t want to appear intimidating or defensive when they gave me comments

about the game. We went through the worksheet, question by question, so I could take notes. The most vocal group was the YMCA. They gave lots of feedback for every question. The Tropical resort also gave good feedback, and [one student] in the sports group gave some as well. I had to call on every other group to get their feedback. The biggest comments was how to speed up play. But overall, they seemed to enjoy the game and their favorite part was being able to apply the course concepts to the “real world”. Just about every person who made a comment appreciated the realistic aspect of the game and the way the course concepts were used to illustrate points. They liked being able to use theories and concepts we had studied to enhance their agency. They liked that they could be creative and make decisions based upon the type of agency they were.

Changes ranged from picking up the pace of the game to figuring out how to add more risk to the game. Overall, I think they made very good comments and I enjoyed hearing from those who talked. They still didn't engage themselves very well in the debriefing. They were quiet unless I called on them, and when I did, then they had plenty to say.

It was strange how quiet the students were after we came back together as a whole class. They were talkative in their Leisureopoly groups, and they were talkative before class, but as soon as all 32 students gathered together for a large group discussion, they did not say anything unless I specifically called on them. I received more valuable feedback from students' reflection assignments describing their experience in this class.

The peer observer also noticed how the students preferred to write their comments on the evaluation worksheet rather than discussing the questions as a whole class. She stated:

Students plunged right in to the worksheet (evaluation sheet). Very quiet in the room. All [students were] working. Could it be they appreciate [the instructor's] desire to value their feedback?...[During the forum] the Sports Complex group still did not contribute and [they] chatted during the forum. [The] YMCA group contributed most of the feedback...more than anybody else.

The peer observer's feedback supports the fact that the YMCA agency was one of the most engaged groups throughout the two weeks we played Leisureopoly. Students in the YMCA group and the Tropical Resort group were the most creative, innovative, and engaged of all of the other groups in the room. Their attentiveness and interest was evident throughout the play of the game and during the reflection session. The Sports Complex group was still disengaged in the process, and they never seemed to work together cohesively. Again, it was evident that students' personalities had an impact on the game, which affected their experience and the overall learning environment.

The purpose of Section II was to analyze what happened when the students played Leisureopoly. Overall, students' indicated that the experience of playing a game in class was fun, different, and memorable, and it was a meaningful way to apply their knowledge about parks, recreation and tourism management. Some groups were more engaged than others, which demonstrated the impact various personalities and behaviors had on the classroom. As the game progressed, more students seemed to become more comfortable with their roles, and responsibilities within this gaming environment. The combination of the game,

students' personalities, and my behavior all influenced the learning environment in some way. This idea will be explored further in Section III.

FINDINGS SECTION III:

ANALYSIS OF THEMES RELATED TO RESEARCH QUESTIONS

The purpose of Section III is to analyze the six themes as they specifically relate to the three research questions for this study. The six major themes I found were: (1) environment, (2) activity, (3) student characteristics, (4) knowledge, (5) instructor characteristics, and (6) structure. In this section, I explore the findings from Sections I and II in more detail, specifically emphasizing students' experiences in a classroom environment that used a game for teaching and learning.

In Section I, I found that Environment and Activity were two of the most frequently mentioned themes that emerged from the students' reflections. To address the research questions, I re-analyzed the Activity theme. I separated all references to Leisureopoly and treated it as its own code in ATLAS. I re-coded all the data related to Leisureopoly to provide a more in-depth analysis of the game's impact on the learning environment. These findings are discussed below in relation to each research question.

Analysis of Research Question #1

The first research question was "What are college students' perceptions and experiences in a classroom environment that includes an educational game for teaching and learning?" Twenty-nine of the thirty students mentioned the Leisureopoly game in their reflection assignment. Leisureopoly had an impact on students' perceptions and experiences in this type of learning environment.

Students described the game and the classroom environment as personal and interactive, and they enjoyed the opportunity to learn while having fun. Their perceptions and experiences in a learning environment that used a game were categorized into four main findings:

Finding #1: The game was a memorable learning experience that changed students' attitudes and perceptions of school.

Leisureopoly provided a different classroom experience than these students were accustomed to. The purpose of the game was to learn and apply the course material, but it was framed in a different way from traditional teaching and learning approaches. Framing the course concepts within the game provided a unique learning opportunity that made the class seem different than school. For example, students worked in groups, but the groups represented agencies. Success was determined by money and mission statements, not grades or tests. Students had to simultaneously balance working cooperatively and competitively while trying to accomplish their mission so they could win the game. Playing a game in a college class was a new experience many of these students had never encountered, and it provided a memorable way to learn, recall, and apply the course material.

Finding #2: The game gave students an opportunity to apply course concepts while introducing them to the profession.

The design of the game allowed students to apply their coursework to a hypothetical leisure service organization. This teaches students how to acquire, process, apply, and evaluate information. This format also allowed students the opportunity to immediately connect their knowledge of course concepts to the application of the material in realistic settings. Students came to this class to learn more about the major and the types of jobs they

could work in after graduation. Many students appreciated the introduction to the profession and indicated that the game solidified their decision to become a PRTM major.

Finding #3: The game gave students control over the learning environment.

By playing the game, students were given control of the learning environment in a way that they had not experienced before. They were responsible for making decisions, solving problems, and deciding which course of action to take to ensure they could meet their mission statement. Some students assumed leadership roles within their groups, but all students were equally responsible for helping their groups make decisions. As the game progressed, my role changed from teacher to facilitator. I did not judge them on right or wrong, or whether or not they made ethical or unethical decisions. They had to take responsibility for their actions, and they monitored the environment themselves. This responsibility seemed to increase their motivation and creativity, and some students played their roles seriously.

Initially, students thought playing a game in college seemed trivial or silly. However, they soon realized the power the game had on their learning and recollection of the course material. Not every student participated during the game, but as the game progressed, more students started to adapt to their role within this new learning environment. Their individual perceptions and experiences varied, but overall, students felt this was a memorable learning experience that added some fun to the classroom.

Analysis of Research Question #2

The second research question was “How is students’ learning influenced by an educational game in the classroom?” One of the main themes that emerged from the data was knowledge, or what students learned. Students naturally discussed their new knowledge

without my having to prompt a response in their reflection question about what they learned. Students stated what they learned and how they learned it, referencing either the activities we did in class or the assignments they completed on their own. Leisureopoly played an important role in helping students recall what they learned and to apply new knowledge in various situations. The game gave them control over the classroom, and while they were having fun, they were also learning. One student explained:

[Leisureopoly] was a great, fun, successful game. I enjoyed it and learned so much from it. It allowed the students to take all that we have learned about the different levels of leisure service, and other theories and terms throughout class, and bring those ideas to life. In assigning us different roles, we had to really look into what every organization was doing and how can we compete with or benefit from their success.

Another student described Leisureopoly as a project filled with “hidden meanings.” This student must have been surprised to realize he was learning and applying course concepts in the midst of playing a game. He explained:

The hands on activity that I enjoyed the most was Leisureopoly. I really liked how I was able to interact with group members and other groups in class. This project also had sort of “hidden meanings”. By this I mean that there were meanings that you could not come up with off the top of your head. When you think about and figure out these meanings you say to yourself, “So that’s what this was for.”

Leisureopoly became more than just a game in this classroom. Many students took the game seriously and tried to understand how to bring the course material to life. For

example, on the first day of class, the peer observer noticed two groups having a conversation about the amenities they had just purchased. The peer observer wrote:

[There was] some conversation between [the Tropical Resort and the Golf Resort] about “where are you going to put that.” I don’t know if they were the same types of leisure services, but the conversation about where amenities were going to be put was amusing – the students appear to be taking this game very seriously.

The Tropical Resort and the Golf Resort were two commercial organizations that were competing against one another. They were competitors, and they played their roles as such. Students worked hard to play the roles they were given so they could solve problems and apply their new knowledge to help their agency be successful. These students were diligent about being true to their agency’s mission and goals. They kept a realistic perspective throughout the game and did not stray from the goals they had established for themselves. I described my observations in my journal:

I notice that this class, more than any other in the past, is always looking back at the mission statement they wrote down on the first day of the game. They are always looking back and doublechecking what they said. Few groups in the past have ever stuck to their missions so diligently in this early part of the game.

Students learned how to apply the course material and how to work together to make decisions, but Leisureopoly’s influence did not stop with just this academic and social knowledge. By playing the game and following their roles, students learned how to assess their own competencies and limitations. The balance between competition and cooperation

allowed students to compare their knowledge, skills, and abilities with those of their peers. The game provided an environment where students could evaluate whether or not they had retained the academic content as well as or better than other students in the class. One student explained:

I feel like there were a few things that I could have done better. For example, the creativity was one thing we could have worked on a little bit better. Also, our group interaction wasn't as good as it could have been. If we had better group productivity, we could have been more creative.

The students in this class have learned the purposes and responsibilities of each type of leisure service agency. Students demonstrated they could write a coherent mission statement, and they used that mission to guide their decision-making and problem solving throughout the course of playing the game. They learned to work cooperatively within their groups and competitively among other groups in the class. Students were able to evaluate their own learning without the stress of grades or exams. They took the game seriously, and it became more than just another fun classroom exercise. For many of these students, their attitudes towards class changed and they began to seem more interested in finding the answers to questions without having to use their notes. They wanted to show me what they learned and how they could apply it to their agency.

Analysis of Research Question #3

The third research question was “How does a learning environment change when an educational game is introduced?” Four weeks into class, I could not understand why I was having such a difficult time connecting with the students in this class and getting them to take responsibility for their learning. Throughout the semester, consistent problems with

attendance, lateness, and students' lack of initiative challenged me to design learning activities that would motivate students to come to class and become more engaged. Some students continued their poor habits regardless of the teaching and learning activities we participated in during class. Others said they came to class just to see what activities they would participate in next. Regardless of students' motivations, changes did occur in the learning environment over the two weeks we played Leisureopoly. I observed four main ways the learning environment changed: (1) community in the classroom, (2) the perception of time, (3) the idea of winning, and (4) attendance.

Community in the Classroom

During the game, students were working together more cohesively, and it became apparent that some type of community had developed in my classroom. Originally, I thought I did not achieve community in the classroom because students had to introduce each other at the beginning of Leisureopoly. Students may not have known every group member's name before we played the game, but as they played, they worked together and made decisions as a group.

[This class] was about getting along with everyone and working as a whole to learn the PRT field and opportunities. I think that's what separates the unforgettable classes with the boring classes that you will never remember.

I thought I had failed at creating community in this classroom. The students just did not seem to "click" together the way other classes have in the past. I realized that they may not have known each other's names, but they knew how to work together as a group.

Another student explained:

Everything we've done we've done as a group. And I find that to be much more useful in the PRT field rather than doing things by ourselves because we may be in a job that requires good group skills.

The idea of community took on a different role in this class than it had in my previous experiences. The format of the game was encouraging and supportive, and students felt they could take risks and express their opinions. Students admitted they were more open and confident when they worked in smaller groups or discussed their ideas with their peers. The environment was not perceived as threatening or embarrassing, even with the competitive atmosphere created within the game.

The Perception of Time

Popular culture has told us “Time flies when you’re having fun.” This class dismissed at 11:05, but all semester, students had packed up their belongings early, usually at 11:00. Every day we played Leisureopoly, however, I had to remind the students that we were out of time so they could head to their next class. Most of the students were engaged and on task, and they were involved in helping their group formulate strategies, but they wanted more time to play. One student explained:

The thing I did not like about the game Leisureopoly was that once I really got involved in the game and things got rolling class was over. I think that we should have a longer class period so things can play out better.

Another student commented:

Only having class three days a week for one hour makes it difficult to play the game. There is so much more than can be done, Leisureopoly could be an entire class by itself.

Time has always been a factor with the game. Expanding the game to two weeks still did not give the students time to do all of the things they wanted to do with their agencies. I was relieved to finally see these students become interested in something. In their time journals earlier in the semester, many of these students seemed apathetic and described themselves as unmotivated. Now they wanted the game to move quickly so they could answer the next question and negotiate a deal with another agency. Students had immersed themselves so much in the fun of creating this imaginary world that they lost track of time. It is not everyday that an instructor has to remind students that they are out of time and have to leave class.

The Idea of Winning

This was a competitive group of students, and Leisureopoly brought out their competitive spirits in the classroom. The game was designed to encourage both cooperation and competition, but this class seemed to thrive off of the competitive atmosphere. As a result, none of the agencies merged together to host a special event or share resources. This group of students saw every other group as their competition, and they believed they were supposed to defeat everyone else to win the game. The two commercial resort groups were fiercely competitive with another. One resort often raised prices and made secret deals with other agencies in spite of the other resort. At no point in the game did any group make an effort to work collaboratively with another group. Collaboration only took place within the individual groups. However, on the group presentation day, the Tropical Resort's creative presentation gained the respect of everyone in the room. After the Tropical Resort group finished their presentation, their most fierce competitors (students in the Golf Resort group)

leaned over and said, “You guys are awesome!” It was evident that throughout the game, students maintained respect for one another and supported each other’s thoughts and ideas.

Some students were completely focused on winning the game rather than playing it. On the fourth day of Leisureopoly, I had a discussion with a student before class. I recorded my thoughts in my journal:

[One student] kept asking me “what do we get if we win the game?” I slyly said “you’ll have to wait and see”. And then I said, “You mean you don’t want to gain knowledge and learning from it?” And he said that he needed a goal to work towards. I smiled, but inside I was so disappointed. Yet again a student demonstrates that he is only concerned about the product. “What do I get out of this?” He is not concerned with the process of playing the game. He is outcome driven. A product of the educational system we have created and continue to feed. All he cares about is the final product, the end, the finish line.

Some of these students must think about their education as an end. They look for the final exam, the final grade, and the final course they have to complete before they graduate. Everything is seen as “final.” The process of acquiring an education and becoming a lifelong learner are concepts that seem unknown to new college students. Regardless of the setting, some students are going to do only what is required of them. For example, one student was discussing a strategy with her group members about how to apply a concept to her agency. She kept saying, “It really doesn’t matter.” This statement could be interpreted in two ways. One, she may not have felt like anything in the game mattered because grades were not attached to any of the activities within Leisureopoly. Some of these students were

completely focused on grades, and anything that did not contribute to their grade was not worth pursuing. She could have been focused on the grade, or the final product. Second, she could have been one of the students from the time journal assignment who was completely apathetic about her life at the time and she simply did not care. Either way, the game did not seem to influence her behavior or change her perceptions. She did not care about winning, which was the opposite reaction for most of the other students in the class.

Leisureopoly's Influence on Attendance

Attendance was an issue for many students in this class throughout the semester. Leisureopoly did have some influence on attendance and encouraged students to get to class on time. On the first day of the game, three students were late and everyone attended class. On the second day, everyone was on time and three people were absent. On the third, fourth and fifth days, everyone was on time and only one person was absent. On the sixth day, seven students were late and two people were absent. It was a Friday morning, and it was the end of the semester, but it is unclear why so many students were late on the last day of the game. Typically in this class, at least five students were late every day and at least two or three were absent. It was rare to ever have one hundred percent attendance in this class.

The more interesting finding regarding attendance was how some of the students' behaviors changed. Each agency was awarded a bonus \$25,000 for each group member who arrived to class on time each day during Leisureopoly. Groups were not awarded bonus money for students who were late or absent from class. Students said they did not want to disappoint their group members or cost their agency money, and they tried harder to get to class on time. When group members were absent, their other group members reprimanded them. The game changed the students' perspectives about the importance of attendance, and

they each had a stake in the overall success of their group. Students had to hold each other accountable, which gave them control over the learning environment.

Leisureopoly had an influence on the learning environment in four main ways: (1) community in the classroom, (2) the perception of time, (3) the idea of winning, and (4) attendance. Overall, the classroom environment and the students' behaviors changed, especially as we continued to play the game. Those students who were not engaged in the game involved themselves at least once or twice during the two weeks we played Leisureopoly, especially when the competition was high. Leisureopoly may not address all classroom management problems, but it did have a positive influence on the overall learning environment for this class.

The purpose of Section III was to analyze the six themes as they specifically relate to the three research questions for this study. A closer look at the Activity and Environment themes revealed more details into Leisureopoly's influence on the learning environment and students' experiences in a classroom that used a game for teaching and learning. The next section of chapter four will discuss my final reflections on the learning environment I created in this classroom.

FINDINGS SECTION IV:

FINAL REFLECTIONS ON THE LEARNING ENVIRONMENT

The purpose of Section IV is to step back from the details of Leisureopoly and look at the "big picture" of this particular classroom environment. Students had more to say about their experience in this class other than just playing the game.

A Student-Centered, Supportive, and Interactive Learning Environment

Much research has been conducted on the impacts of student-centered and active learning, but what does it really mean? In my class, it took more than just the design of student-centered activities and discussions to engage the students in the academic content. I also had to think about these students' emotional, social, and psychological needs. I had to create a socially supportive environment where students felt comfortable sharing their opinions and ideas. It took more than just a well-designed student-centered learning activity to get these students involved. They needed the opportunity to establish a relationship with their peers and with me before they could move on to the more in-depth learning activities I had planned.

Through my course design and teaching philosophy, I challenged students' assumptions of what it means to be a student in a college classroom. As stated in chapter one, these students knew how to play school. When I challenged these assumptions and broke the traditional rules, students had to re-learn their roles and my expectations. Students knew the typical classroom environment is structured for them to listen, take notes, and then repeat the information on a test. Some of them are unsure of environments that change this pattern. One student in my class expressed his thoughts about his experience in this new type of learning environment. He wrote:

My first impression of this particular PRT 152 class was not necessarily a good one. At first I was a little uncomfortable with the idea of not going in to the usual, hour-long lecture, taking notes on everything, and regurgitating information when the time came. I had never been in a class where so much of the learning experience depended on student interaction and participation.

I didn't like it at first, but as time wore on, I began to see that not only did I learn more in this environment, I also got to know many of my fellow students who I will be spending the next few years of classes with, and actually enjoyed coming to class.

As stated in chapter two, Rogers' (1969) believed that an experiential, supportive, challenging and compassionate learning environment will lead to enhanced student achievement where students feel they can take a risk and explore their interests within their own realms of reality. This is evident in a student centered learning environment, regardless of the types of games or activities that occur. One student's reflection included a summary of an interactive lecture I presented on the second day of class. She wrote:

The first thing we did was define leisure. But what was so fun was that we weren't just told what leisure was. We were given the opportunity to define it ourselves and then compiled everyone's ideas into one big definition. That has always been one of my favorite things about this class. We have never been lectured to in this class. We have only been directed in the right direction and guided to find the right answers.

This student's reflection demonstrates that other teaching and learning strategies are successful in a college classroom, as long as the students are placed in the center of the learning. She felt important because she was the one creating the class. I gave students some level of control over the learning environment early in the course, and this made them feel important and confident.

Rogers' (1969) experiential learning theory explained that student-centered learning creates favorable conditions and supportive environments that encourage students to achieve

some level of self-actualization. Student-centered learning was evident in this class. Students' interests were placed first and foremost in the overall design and delivery of the course content. Although I cannot determine that the game was the only reason students felt the way they did, I can say that the open and inviting learning environment created through activities such as Leisureopoly led students to feel important. One student wrote:

I felt confident and important in the class. These kinds of feelings lead students to want to come to class and want to learn more about themselves and where they are going in life.

It is not appropriate to just assign students into a group, give them an activity, and say, "Here, learn something." Student-centered learning and experiential education must take into account all of the students' needs, and consideration must be given to the type of learning environment created. When I introduced Leisureopoly and put students into groups, they just sat there until I told them to introduce themselves and get to know one another. The new experience of playing a game in class was initially confusing for them, and I had to be aware and supportive of the new responsibilities I asked them to take on.

Once students understood my class was not going to be based on lectures and notes, they adjusted to their new role. Some students thrived in this environment, but others did not. For some students, there was either too much or too little structure within this type of setting. For others, the balance of student responsibility and classroom structure created an environment where they could learn more about themselves and where they might fit within this profession. This could lead to interesting approaches for designing introductory course learning environments to be both supportive and challenging. Introductory courses should support students in their current roles as new college students and academics, but they should

also challenge them in the roles they will one day acquire as professionals and lifelong learners. This means more than just creating a student-centered learning environment. We, as educators, must also be supportive, interactive, and able to recognize our role in facilitating students' overall development.

SECTION V: LIMITATIONS

The final section in chapter four is the discussion of limitations for this research study. Careful consideration was given to the overall design of this study to ensure accurate representation of ideas. The two main limitations are experimenter bias and the Hawthorne Effect.

Experimenter bias was one limitation of this study. As the creator of the game, instructor for the course, and the researcher for this study, bias was a main concern. Rather than working against this reality, I used phenomenology to guide my research. Phenomenology embraces the involvement of the researcher and I was able to place myself within the research setting. This was a qualitative study, and its intention was not to generalize to other populations. The purpose of this study was to search for deeper meanings through in-depth analysis and reflection. One potential problem using this approach might have been the number of participants in the study. Thirty participants is a large sample size for a phenomenological study. Phenomenological studies can have as few as one participant, or as many as thirty. Since phenomenology's purpose is to dig deeper into the essence of an experience, the fewer participants, the deeper one could go into a participant's thoughts, feelings, and emotions about a particular phenomenon. For this study, thirty participants limits me from probing deeper into each individual student's range of experiences, but I was

still able to capture the overall perceptions of the learning environment from a variety of perspectives.

The Hawthorne Effect was another limitation of this study. Students were not aware that I was observing them for research purposes, but they were aware that I was grading them on their class participation. As a result, they may have performed differently for me during the game than they would have if they were not being graded. Grades were not attached to Leisureopoly in any way, but students did not know this while they were playing the game. Students also knew that I would be reading their reflection assignments. Although I reminded them that I would not read the reflections until after final grades had been submitted, some students may not have been comfortable writing their true feelings about the class.

The purpose of chapter four was to discuss the findings for this study. Chapter four was divided into five major sections. Section I was an analysis of all of the major themes, or findings, based upon all of the data. Section II was an analysis of the Leisureopoly game. Section III was a more detailed analysis of the themes as they specifically relate to the research questions. Section IV was a discussion of my reflections on the “big picture” of the overall learning environment in this class. Finally, Section V was a discussion of the limitations of this study.

CHAPTER 5

DISCUSSION, IMPLICATIONS, AND FUTURE RESEARCH

The purpose of this study was to describe and interpret students' perceptions and experiences in a learning environment that included a game as a teaching and learning tool.

The three research questions were:

1. What are college students' perceptions and experiences in a classroom environment that includes an educational game for teaching and learning?
2. How is students' learning influenced by an educational game in the classroom?
3. How does a learning environment change when an educational game is introduced?

Phenomenology was the interpretive paradigm used to analyze and explain students' experiences within this type of learning environment. Data were gathered using the students' reflection assignments, two peer observers, and my personal reflection journal. The combination of these approaches, coupled with Rogers' experiential learning theory and Moos' learning environment research, provided a solid foundation from which to study the influence of Leisureopoly within this introductory course.

The Meanings of Students' Experiences

A phenomenological study would not be complete without a discussion of meanings and interpretations. Phenomenology asks us to determine the meaning, or essence, of an experience. In this study, the overarching phenomenological question could be, "What is the essence of college students' experiences in a classroom?" The college classroom can be a scary, intimidating, and confusing place. Introductory courses are traditionally lecture halls packed with students who are being "weeded out" before moving on to the next series of courses. With only one or two papers, a midterm exam, and a final, there are few

opportunities to make mistakes. The whole experience can be very stressful for new college students who are trying to figure out who they are and what they want to become.

Based on my students' responses, one of the most important elements in a college classroom is a sense of community. Humans have a basic need to interact and socialize with others, yet the traditional design of our classrooms limits this behavior. Students in my class wanted the opportunities to work with their peers and make new friends, and they appreciated the activities that were designed to encourage this type of collaboration rather than work against it. As the semester progressed and students felt more comfortable with one another, they became increasingly engaged and interactive during class discussions. They wanted to share stories and experiences as long as I kept the environment open and welcoming. For many, this was a whole new world for them, and as one student said, "It didn't feel like school."

The social aspect of being in school is something that is often overlooked in many college classes. Some instructors may not feel their class time is an appropriate forum for students to socialize with one another. However, students need this opportunity to develop interpersonal relationships and learn more about the people they sit beside throughout a whole semester. Relationships appeared to be a key force in these students' learning. They consistently mentioned their relationship with their peers and with me. They placed great emphasis on the social setting in a classroom environment, and these relationships appeared to be what made the course meaningful and memorable in their eyes. It is possible that good relationships can overcome other negative aspects such as the poor physical design of a classroom or lack of other resources.

Few students have ever been challenged or invited to take responsibility for their education, or to become “partners” in the process. My attempt in helping my students take on this responsibility was the use of Leisureopoly. Students were initially confused at the idea that they were taking control over the classroom when I introduced the game. They did not know what to do or who to turn to for leadership. They suddenly had to solve their own problems with the help of each other. When my role shifted from teacher to facilitator, students had to re-adjust their behavior to succeed in this new environment. Some students emerged as leaders. Others were more comfortable as followers. Some students found an outlet to express their creativity. Others did just enough to get by. Some students found their passion within the parks and recreation profession. Others determined this was not the field for them. These observations reflect another source of meaning for students in college classrooms: the opportunity for personal development.

Students learned the academic and professional knowledge presented in this course, but many of these students said they learned more. They learned something about themselves. Courses that offer students a chance to grow and learn within themselves are meaningful and push us one step closer to helping students become lifelong learners. Our role is to guide this development and become aware of the needs of the students sitting in our classrooms. Students can take responsibility for their learning, but they need guidance and support to do so. Just because students have stepped onto a college campus does not automatically ensure they are ready and able to take on this new responsibility.

Implications

This study allowed me to integrate theories and ideas from a variety of subjects. I began by studying the broad theme of teaching and learning in college classrooms, and that

literature led me into experiential education. From there, I explored literature related to educational theory, student development, and learning environments, and this led me into an entirely new branch of literature related to educational games. All of these topics allowed me to build a solid foundation from which to study Leisureopoly. I have tried to integrate all of these perspectives in this study, and the results have implications for several different areas including: (1) introductory courses, (2) assessment, (3) learning environment research, (4) educational games, and (5) higher education. Each of these implications is discussed below.

Implications For Introductory Courses

Introductory courses can be designed to present students with basic definitions and theories, but we should also think about the larger implications of the introductory course. Students in introductory courses may assume the college classroom is an extension of their high school experiences. This is the time when college instructors should challenge these assumptions and begin guiding students towards the path of what it means to become a lifelong learner.

Students needed to constantly re-visit concepts and apply them in new ways to fully understand their meaning. Throughout all of the class activities, assignments, and discussions, I emphasized how the material could be used outside of the walls of this classroom. Students placed more meaning on course material that was integrated and applied. This integration and application is critical. Introductory courses can provide students with a glimpse into the experiences and expectations of professions in the field and help them decide whether or not this is the major for them. Many of the students in my class were eager to learn more about life after graduation. They wanted to know what PRTM professionals do in their jobs. Leisureopoly gave them a taste of this experience and allowed

them the opportunity to apply what they had learned in a realistic context. Some students struggled with this concept, perhaps because they had not thought about how to apply the material they were learning in their classes to actual problems faced by professionals in the field.

The changing demographics, interests, and expectations of future college students will influence delivery of services, including educational practices. Instructors need to be aware, not only of different learning styles and personalities in an environment, but also how to make the course material relevant and applicable to a variety of students including adult learners, minority students, transfer students, part-time students, commuters, and those from a variety of ethnic, cultural, racial and social backgrounds. To determine whether or not we are meeting the needs of these new college students, assessment will play a key role in helping us focus our efforts and improve our services while justifying changes in the way we facilitate the learning process.

Implications For Assessment

Assessment and accountability have become the new “buzz” words in higher education. Although the process is sometimes met with resistance, assessing our courses not only helps us realize where we are, but it can help us identify where we are going and how to get there. In the classroom, assessment helps instructors clarify learning outcomes. Assessment also provides a forum for evaluating the teaching and learning process by offering ways to identify what improvements or changes need to be made.

Assessment also generates opportunities for students by clarifying expectations and presenting clear goals and objectives for measuring success. Leisureopoly has become the ultimate classroom assessment tool for my PRT 152 course. Through the application of

questions and action cards, I can quickly determine what students have learned and what we need to review. More importantly, the students themselves can assess their knowledge against their peers without risk or embarrassment. This keeps the learning environment open and welcoming, while simultaneously providing immediate feedback.

Implications For Learning Environment Research

Learning environment research continues to be a popular area of interest for educators. In elementary and secondary classrooms, educators emphasize ways to design effective learning environments to enhance the teaching and learning process. However, educators have only recently begun to explore the impact of learning environments in higher education settings. The few research studies that have been conducted in college classrooms have traditionally been based on quantitative forms of measurement and analysis. Few studies have used qualitative techniques to interpret how the students experience the learning environment and what they determine to be of importance.

This study presented several key findings regarding students' perceptions in an introductory college classroom learning environment. Throughout this study, I emphasized the students' opinions using their voices and points-of-view based on their reflection assignments. This approach could lead to new ways of assessing and designing learning environments. Rather than relying on predetermined scales and levels of agreement or disagreement about something in the learning environment, we can actually see and experience the learning environment through the eyes of our students. Their perceptions can help us design classroom experiences that meet their psychological, social, and academic needs. By digging deeper into their experiences, we can understand how effectively create classroom environments that both challenge and support students' development.

Implications For Educational Games

Educational games have the power to change learning environments. Games create a fun and unique learning experience for the students and the instructor. This style of teaching also challenges students' assumptions about education and what their role is within this new environment. This study showed how some students responded well to the game, while others struggled with these new expectations and responsibilities.

This study is unique in that no research has been conducted on students' experience playing an educational game in a college classroom. In past research, anecdotal evidence suggested an increase in students' motivation and enjoyment. However, no attempts were made to understand why the students' perceptions changed and what they considered to be important within the game.

A final implication for this study is the introduction of Leisureopoly. It began as a simple frame game to review for a final exam, and it has now taken on an entirely new purpose within my classrooms. This process shows that with some creativity and the ability to take risks, instructors can design unique learning experiences that have lasting impacts on their students' learning.

Implications For Higher Education

If the goal of higher education is to produce global citizens who are capable of making contributions to the greater society, then higher education professionals must be encouraged to intentionally create learning environments and programs that enhance personal relationships and the integration of course and life experience (Terenzini, Pascarella, & Bliming, 1999). More than 75% of high school graduates are enrolling in college, but over half of them are not prepared for college level work and must complete remedial courses to

improve their skills and knowledge (Association of American Colleges and Universities, 2002). There are so many students who seem to falter and fail once they arrive to college. Educators should not see this as a failure, but as an opportunity to improve the current conditions. This process can begin in introductory courses.

Students do not come into the classroom as “blank slates.” They are influenced by all of the experiences they have had, both in and out of the classroom environment. First-year inquiry courses, problem-based learning techniques, and experiential education strategies require smaller, more intimate classrooms where students have time to take risks and to explore topics they are interested in so they can make new discoveries about the world around them. Smaller classes support students’ needs for social and personal development, which were two of the main findings from this study. It is not feasible to ask that every single classroom on a university’s campus be altered to accommodate this type of teaching and learning. However, there should be a standard where all students experience a series of these courses as they matriculate through the university. Setting the expectation that all students experience an intensive, focused, experientially designed course during their first year of college would set the standard by which students’ expectations would be measured. Whether the learning occurs through a discussion, a service experience, or a game, the purpose is to give students the opportunity to apply their knowledge and learn more about themselves personally and professionally.

Recommendations for Leisureopoly

This study emphasized students’ perceptions of a classroom environment that used a game for teaching and learning. Leisureopoly was a successful teaching and learning tool for this group of students; however, it is important to understand that this type of teaching format

will not work effectively for all groups. Some of the students actually suggested the game be designed to incorporate more elements of competition. I have found that many of my students would prefer to have one winner rather than allowing the potential for all groups to win based on whether or not they complete their mission statement. The concept of winning and educational games has received much debate throughout the gaming literature, and ultimately, it is a decision to be made by the instructor based upon the learning styles and personalities of his or her students.

For larger groups, changes will need to be made to this basic layout to keep up the momentum of the game and to reduce the chances of students becoming bored or disinterested. Varying the type of agencies as well as the playing cards will only enhance the game and stretch the possibilities for more creative versions of the basic game format. For example, other action card topics might include ethics, budgeting, legislation, leadership or theories. It is also recommended that future games include more natural resource elements, perhaps policy development or legislative acts.

Finally, since the students in this class did not know each other's names before playing the game, there should be an activity to help the group members become comfortable with one another. One of the peer reviewers made this suggestion:

[You] might need to include a "getting to know your group members" activity before the game. [This will] help them process each other so they know the strengths and weaknesses of each group member.

A simple exercise such as this would help students understand the skills, attributes, and talents they bring to their "agency". A "getting to know you" activity is a non-threatening way to generate immediate conversation within the groups. Ultimately, it would

be an activity that would aid in creating a supportive learning environment where students would feel comfortable making contributions within their individual groups.

Future Research

Learning environment research continues to be conducted at all levels of education. The increase in distance education courses and web-based learning environments has attracted the attention of a new generation of researchers. These studies have given learning environment research a new life, but we must not forget the importance of the impact a traditional classroom environment has on students' perceptions, experiences, and behavior.

Future research needs to explore impacts of other types of teaching innovations on the learning environment. We also need to take a deeper look at Moos' model in relation to learning environments that use experiential learning techniques. For example, Moos' model does not place priority over one dimension or another. In this study, building community and social relationship through hands-on classroom activities appeared to be the most important dimension in the students' perceptions of the classroom environment. All of the activities, including Leisureopoly, aided in the development of this social community by requiring students to interact with one another on some level to accomplish their goal. Leisureopoly's role within this environment changed students' behaviors and impacted their learning.

Future research is needed to understand the instructor's experience facilitating a game in a college environment. Emphasis has traditionally been placed on the students' experiences within a learning environment, but it would be beneficial to understand what the instructor is feeling and thinking as he or she is designing, implementing, and evaluating the use of a game for teaching and learning. Such a study could help other instructors

understand the complexities of introducing a game into a classroom and why it is or is not an endeavor worth pursuing.

Another possibility for future research is further adaptation and development of the College and University Classroom Environment Inventory (CUCEI). The CUCEI is one of the most widely used evaluation instruments for assessing college classroom environments. Future research in experiential education should explore the connections and differences between the themes found in a gaming environment and the dimensions found in the CUCEI. For example, in this study I found that students wanted to add to their professional knowledge and were searching for realistic application of course concepts. The CUCEI does not take “profession” or “real world applications” into account, yet it seems to be an important factor in students’ decision about choosing a major and learning what types of opportunities lie ahead for them after graduation. College students do not want to waste their time. They are eager to learn more about what they can do with a degree in a field once they graduate.

Another area of interest for future research is the physical layout of the classroom environment. Not a single student mentioned the physical layout of the classroom in this study, but the peer observers immediately noticed the classroom as a restriction. Thirty students in a lecture hall that seats 90 was not an ideal situation for group work or class discussions. We could not move the chairs, nor did the students have space to work on group activities. I thought the room would restrict the opportunity for group interaction and discussion, but it did not appear to have an influence from the students’ point-of-view. I thought the design of the classroom limited the possibilities for the Leisureopoly game, but the students never mentioned it. Perhaps they were familiar with these “lecture settings” and

it did not affect them one way or the other. Future research could explore the impacts of the physical classroom design on the overall learning environment.

A final opportunity for future research is further analysis of Leisureopoly. Leisureopoly has the potential to become more than just a game. If Leisureopoly continues to have an impact on the learning environment, it should be tested in other settings and with other formats. It could become a powerful teaching tool for all types of introductory parks and recreation courses. Since I used a qualitative approach for this study, it would also be interesting to evaluate the game's impact using an assessment tool such as the CUCEI.

Final Thoughts

My last journal entry captures my thoughts as I brought this semester to a close. After the last day of class, I wrote:

The semester is over!! In some ways, I'm sad to see it go, but in others, this couldn't have come early enough. It has been hard to work with some of these students this semester. This has, by far, been the most difficult class I have had to teach—period. I will miss working with some of the students who really care about their education and the profession. Those who don't seem to care have tested my patience beyond limits. This semester has definitely opened my eyes to the realities of the classroom and how challenging teaching first year courses can be. The problems that face instructors in higher education can make or break a semester, and unfortunately, a bad group will impact the teaching and learning of all of the students. This semester has tested my commitment and dedication to teaching. There were days when I was so frustrated I never wanted to go back in that classroom. Then there were days when I couldn't

wait to go back. Then there were days when the lack of motivation from my students only inspired me to work harder to get them engaged. It has certainly been an up and down semester.

This journal entry shows the mixed emotions I had teaching this class this semester. This is probably typical of many instructors, but my teaching experiences have never been this challenging. My perceptions of this class were more negative than those of my students, and this is atypical of the literature on learning environment research. In studies using the CUCEI, instructors were more likely to perceive their classroom environment more positively than their students. Perhaps this suggests the need for more qualitative approaches to learning environment research.

Those who teach in college cannot ignore the importance of learning environments on students' success. Leisureopoly provided a meaningful and fun learning experience for all of the students in this class. The game was one of the more memorable and influential learning activities; however, it was not the impact of this one game that shaped students' perceptions and experiences of the learning environment. Just as Moos' framework illustrated, students' experiences were shaped by the dynamics and interconnectedness of all of the variables in the classroom environment, not just the game.

In their reflection assignments, I asked students to describe their experience in the PRT 152 class this semester. I was looking for their responses to describe all of their experiences, not just the learning environment or the game. The fact that a majority of the students mentioned "environment" or "setting" or "atmosphere" in their reflections indicates the power of the environment on students' experiences. Without being prompted, students

immediately discussed how the atmosphere of this classroom aided in their learning, participation, and motivation.

As I step back and reflect upon this experience, I realize the need to think “outside of the box” when it comes to designing research studies in educational settings. I took a risk when I decided to attempt a qualitative study in a field that is grounded in the traditional research paradigm. In the initial planning stages of this dissertation, I struggled with the quantitative-qualitative debate, not fully understanding how the contributions of both approaches aid in our understanding of the world around us. Only after much exploration and personal reflection did I realize the potential of using a qualitative approach for analyzing what happens in the classroom. The use of qualitative research methods allowed me to see the classroom from my students’ point-of-view, using their language, their descriptions, and their emotions to add “flavor” and depth to the findings. I would not have been able to capture this unique essence of students’ experiences using a quantitative research design.

The decision to approach this study from a phenomenological perspective required much reading, writing, and thinking. Phenomenology is not a quick or easy method for analyzing qualitative data. This study required intensive reflection, discipline, and rigor on my part. For the entire four months of the spring semester, I was always thinking about my class, my teaching, and my research from a deeper frame of reference than I ever had before. From the specific wording of the research questions to the detailed recording of my thoughts in my research journal, I was immersed in data collection and analysis every single day of the semester.

Phenomenology embraces the researcher as part of the research experience, and as I changed, so did my data. I became a “master of reflection” during this process because every day presented itself with a new activity or experience that I had to plan, implement, record, reflect upon, and evaluate. Everything was important, and I did my best to record and write as much as I could remember at the end of every class. My personal research journal began as simple observations and collections of facts, but I quickly realized that I needed to capture my feelings, thoughts, and emotions to have the rich data necessary for a phenomenological study. Recording my thoughts almost became therapeutic in the sense that I could express my real emotions rather than giving a politically correct response. I poured myself into my journal, often not being able to type as fast as my mind could think.

Through the course of completing this dissertation, I have learned that the research process requires discipline, focus, flexibility, trust, and a leap of faith. I learned discipline through the meticulous process of keeping a personal research journal. In the early stages of planning my research study, I was trying to solve all the world’s problems with my dissertation. Now I have learned how to narrow my focus down to a manageable topic and to concentrate on a specific aspect of learning environment research. Regardless of the research paradigm used, the process is rigorous and demanding and requires a great deal of flexibility. I cannot control everything. Research also requires trust, both on the part of the researcher and on the part of the participants. My students trust that I will respect their anonymity, and those who read my research trust that I have followed the proper protocol for conducting qualitative research. Finally, I have learned that the research process requires a leap of faith. I spent many hours trying to design the perfect study in the most perfect setting with the most perfect technique supported by all of the perfect citations from the literature. At some point,

I just had to take the leap and do it. It was scary stepping into a world of the unknown, but as the Chinese philosopher Lao Tzu proclaimed, “A journey of a thousand miles must begin with a single step.” I learned that the journey of research cannot begin without taking that first step, and I know now that I must trust myself enough to stop obsessing over perfection and just do it.

This study has been an exercise in personal growth and professional development. I have learned much about research, but in the process, I have learned about myself as a teacher, researcher, and learner. I think this is a unique element of qualitative research. Phenomenology allowed me to embrace all of these perspectives, but it also meant that I was taking a risk by being included as part of the study. It was scary to put my teaching in the spotlight and have it criticized by others. However, if I had it to do over again, I would choose the same approach. I am naturally reflective, and I think qualitative research is a good match for me. I worked hard to find a balance between the positive and negative comments from my students, the peer observers, and my personal journal. It was challenging to stay true to the demands of phenomenology and qualitative research, but I enjoyed the process. From learning to use the ATLAS software to organize my data to determining which quotes to include in my analysis of the findings, this study presented many opportunities for me to grow and learn as a student and as a researcher.

Throughout this experience, I have come to realize that a classroom environment is a vulnerable and delicate place. It is susceptible to personalities, backgrounds, moods, talents, interests, strengths, weaknesses, and even the weather. Sometimes, one glitch in the system can disrupt the whole environment. The teaching and learning process is always in a constant state of change, resulting in dynamic learning environments and increased

opportunities for research. A learning environment is a powerful factor in education and one that should continue to be explored.

REFERENCES

- Aldridge, J., Fraser, B. & Huang, T. (1999). Investigating classroom environments in Taiwan and Australia with multiple research methods. *Journal of Educational Research*, 93(1), 48-62.
- Association of American Colleges and Universities. (2002). *Greater expectations: A new vision for learning as a nation goes to college*. Retrieved September 19, 2003, from <http://www.greaterexpectations.org>
- Anderson, K. S. (1998). *Let the games begin: The gaming approach as an alternative paradigm in nursing education*. Unpublished doctoral dissertation, North Carolina State University, Raleigh.
- Angelo, T. and Cross, P. (1993). *Classroom assessment techniques: A handbook for college teachers*. San Francisco: Jossey-Bass Publishers.
- Bogdan, R. C., and Biklen, S. K. (1998). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn and Bacon.
- Bonwell, C. and Eison, J. (1991). *Active learning: Creating excitement in the classroom* (No. 1). Washington, DC: George Washington University Clearinghouse on Higher Education.
- Boocock, S. (Ed.). (1968). *From luxury item to learning tool: An overview of the theoretical literature on games*. Beverly Hills, CA: Sage Publications.
- Borges, M., Silva, M., & Cunha, F. (October 17-21, 2004). *Innovative approach to teaching/learning strategies in engineering education*. Paper presented at the International Conference on Engineering Education (ICEE), Gainesville, FL.

- Boyer, Ernest (1997). *Scholarship assessed: Priorities of the professoriate*. San Francisco: Jossey-Bass Publishers.
- Brougere, G. (1999). Some elements relating to children's play and adult simulation/gaming. *Simulation and Gaming*, 30(2), 134-146.
- Cantor, J. (1992). *Delivering instruction to adult learners*. Middletown, OH: Wall & Emerson.
- Clayton, P. H. (2005). Service-learning overview. Retrieved on August 31, 2005 from <http://www.ncsu.edu/fctl/Initiatives/Service-Learning/>
- Cullen, M. J. (1995). *Assessing the learning of undergraduate students when using a social justice education game*. University of Massachusetts.
- Dempsey, J., Haynes, L, Lucassen, B, and Casey, M. (2002). Forty simple computer games and what they could mean to educators. *Simulation and Gaming*, 33(2), 157-168.
- Denzin, N. K. & Lincoln, Y. S. (1998). *The landscape of qualitative research*. Thousand Oaks, CA: Sage.
- DeYoung, A. J. (1977). Classroom climate and class success: A case study at the university level. *Journal of Educational Research*, 70(5), 252-257.
- Dickie, S. (1999). *The lived experience of being a distance learner*. Unpublished Master's Thesis, Athabasca University, Athabasca, Alberta.
- Dorman, J. (2002). Classroom environment research: Progress and possibilities. *Queensland Journal of Educational Research*, 18(2), 112-140.
- Dustin, D. (1977). *Gaming-simulation in the college classroom: An assessment of QUAGMIRE, a recreation management game*. Unpublished Doctoral dissertation, University of Minnesota.

- Ellis, C. (2000). *Autoethnography, personal narrative, reflexivity*. Thousand Oaks, CA: Sage Publications, Inc.
- Evans, N. J., Forney, D. S., & Guido-DiBrito, F. (1998). *Student development in college: Theory, research and practice*. New York, NY: John Wiley & Sons, Inc.
- Evensen, D. H. (2004). To group or not to group: Students' perceptions of collaborative learning activities in law school. *Southern Illinois University Law Journal*, 28(Winter), 343-421.
- Finney, S. J. (April 24-28, 2000). *The meaning of success for students in statistical methods courses: A phenomenological study*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Fraser, B. (1986). *Classroom environment*. London: Croom Helm.
- Fraser, B. (1998). Classroom environment instruments: Development, validity and applications. *Learning Environments Research*, 1, 7-33.
- Fraser, B. (2002). Learning environments research: Yesterday, today and tomorrow. In Goh, S. C. & Khine, M. S. (Eds.), *Studies in educational learning environments: An international perspective* (pp. 1-25). New Jersey: World Scientific.
- Fraser, B. and Walberg., H. (1991). *Educational environments: Evaluation, antecedents and consequences*. New York: Pergamon Press.
- Gredler, M. (1992). *Designing and evaluating games and simulations: A process approach*. Houston: Gulf Publishing Company.
- Greenblat, C., and Duke, R. (1981). *Principles and practices of gaming-simulation*. Beverly Hills, CA: Sage.

- Greenblat, C. S. (1988). *Designing games and simulations: An illustrated handbook*.
Newbury Park, CA: SAGE Publications.
- Greer, J. (1977). *Motivating learners with instructional games*. Dubuque, IA: Kendall/Hunt
Publishing Co.
- Henderson, K. (1991). *Dimensions of choice: A qualitative approach to recreation , parks
and leisure research*. State College, PA: Venture Publishing, Inc.
- Honeycutt, B. (2004). Classroom learning activities: Using frame games in the college
classroom. *SCHOLE: A Journal of Leisure Studies and Recreation Education*, 19,
169-173.
- Husserl, E. (1980). *General introduction to a pure phenomenology* (F. Kersten, Trans.).
The Hague: Martinus Nijhoff.
- Informal Education Homepage. *Carl Rogers and informal education*. Retrieved April 2,
2004, from <http://www.infed.org/thinkers/et-rogers.htm>.
- Jensen, E. (1995). *The learning brain*. San Diego, CA: Turning Point Publishing.
- Jones, K. (1980). *Simulations: A handbook for teachers*. New York, NY: Nicols Publishing
Co.
- Kashibuchi, M. and Sakamoto, A.. (2001). The educational effectiveness of a
simulation/game in sex education. *Simulation and Gaming*, 32(3), 331-343.
- Kirk, J. (2004). The making of a gaming-simulation course: A personal tale. *Simulation and
Gaming*, 35(1), 85-93.
- Kirts, C. A., Tameo, M. A., and Sinz, J. M. (1991). The COMMONS game: Its instructional
value when used in a natural resources management context. *Simulation and Gaming*,
22(1), 5-18.

- Kirschenbaum, H. (1979). *On becoming Carl Rogers*. New York: Delacorte Press.
- Komives, S., Woodard, D., & Associates. (2003). *Student services: A handbook for the profession* (4th ed.). San Francisco, CA: Jossey-Bass.
- Kracker, J. P., H. (2003). The experience of libraries across time: Thematic analysis of undergraduate recollections of library experiences. *Journal of the American Society for Information Science and Technology*, 54(12), 1104-1116.
- Kriz, W. C. (2003). Creating effective learning environments and learning organizations through gaming simulation design. *Simulation and Gaming*, 34(4), 495-511.
- Lazerson, M., Wagener, U. & Shumanis, N. (2000, May/June) Teaching and learning in higher education, 1980-2000. *Change*, 32, 13-19.
- Leamson, R. (1999). *Thinking about teaching and learning: Developing habits of learning with first year college and university students*. Sterling, VA: Stylus Publishing, Inc.
- Lederman, L. (1992). Debriefing: Toward a systematic assessment of theory and practice. *Simulation and Gaming*, 23(2), 145-160.
- Logan, K. (2003). *Do girls prefer a different computing learning environment to boys? An analysis of the computing learning environment of upper secondary students in Wellington, New Zealand*. Paper presented at the Australian Women in Instructional Technology Conference.
- Maidment, R., and Bronstein, R. (1973). *Simulation games: Design and implementation*. Columbus, OH: Bell & Howell.
- Meyers, C., and Jones, T. B. (1993). *Promoting active learning: Strategies for the college classroom*. San Francisco, CA: Jossey-Bass.

- Miller, C. (2001, November 8-12). *The application of Carl Rogers' person-centered learning theory to web-based instruction*. Paper presented at the National Convention of the Association for Educational Communications and Technology, Atlanta, GA.
- Milhollan, F. and Forisha, B.(1972). *From Skinner to Rogers: Contrasting approaches to education*. Lincoln, NE: Professional Educators Publications, Inc.
- Moos, R. (1979). *Evaluating educational environments*. San Francisco: Jossey-Bass Publishers.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publications.
- Myint, S. K. & Goh, S. C. (2001). *Investigation of tertiary classroom learning environment in Singapore*. Paper presented at the International Educational Research Conference, Australian Association for Educational Research, University of Notre Dame, Fremantle, Western Australia, December 2-6, 2001.
- Nair, C. & Fisher, D. (2001). Learning environments and student attitudes to science at the senior secondary and tertiary levels. *Issues in Educational Research, 11*, Retrieved from <http://education.curtin.edu.au/iier/iier11/nair.html> on September 14, 2004.
- Oblinger, D. G. (2003, December 12, 2003). Unlocking the potential of gaming technology. *Chronicle of Higher Education*.
- Pepper, K. & Hamilton, L. (2002). Making a change: The effects of the leadership role on school climate. *Learning Environments Research, 5*, 155-166.
- Peters, Vincent A. M., and Vissers, Geert A. N. (2004). A simple classification model for debriefing simulation games. *Simulation and Gaming, 35*(1), 70-84.

- Petranek, C. F. (2000). Written debriefing: The next vital step in learning with simulations. *Simulation and Gaming, 31*(1), 108-118.
- Petranek, C. F., Corey, S., & Black, R. (1992). Three levels of learning in simulations: Participating, debriefing, and journal writing. *Simulation and Gaming, 23*(2), 174-185.
- Pratt, D. (1998). *Five perspectives on teaching in adult and higher education*. Malabar, FL: Krieger Publishing Company.
- Quay, J. (2003). Experience and participation: Relating theories of learning. *Journal of Experiential Education, 26*(2), 105-116.
- Rodgers, C. (2002). Defining reflection: Another look at John Dewey and reflective thinking. *Teachers College Record, 104*(4), 842-866.
- Rogers, C. (1969). *Freedom to learn*. Columbus, OH: Charles E. Merrill Publishing Company.
- Ruben, B. D. (1980). Communication games and simulations. In R. E. Horn, and Cleaves, Anne (Ed.), *The guide to simulations/games for education and training* (4th ed.). Beverly Hills, CA: Sage Publications.
- Sokolowski, R. (2000). *Introduction to phenomenology*. Cambridge, UK: Cambridge University Press.
- Specht, L. B., and Sandlin, P. K. (1991). The differential effects of experiential learning activities and traditional lecture classes in accounting. *Simulation and Gaming, 22*(2), 196-210.
- Spence, L. D. (2001, November/December 2001). The case against teaching. *Change, 33*, 11-19.

- Spiegelberg, H. (1975). *Doing phenomenology*. The Hague, Netherlands: Martinus Nijhoff.
- Squire, K. (2002). Cultural framing of computer/video games. *International Journal of Computer Games Research*, 2, Retrieved from <http://www.gamestudies.org/0102/squire> on September 18, 2004.
- Steinwachs, B. (1992). How to facilitate a debriefing. *Simulation and Gaming*, 23(2), 186-195.
- Stolovitch, H. and Thiagarajan, S. (1980). *Frame games* (Vol. 24). Englewood Cliffs, NJ: Educational Technology Publications, Inc.
- Stringer, E. (2004). *Action research in education*. Upper Saddle River, NJ: Pearson Education, Inc.
- Stuckey, B., Hensman, J., Hofmann, T., Dewey, B., Brown, H. & Cameron, S. (June 24-29, 2002). *Debunking the buzz worlds or can hermeneutic analysis be used to evaluate pedagogically based learning objects designed from constructivist epistemological ontologies defined in XML metadata?* Paper presented at the ED-MEDIA World Conference on Educational Multimedia, Hypermedia & Telecommunications, Denver, CO.
- Terenzini, P., Pascarella, E. and Bliming, G. (1999). Students' out-of-class experiences and their influence on learning and cognitive development. *Journal of College Student Development*, 40(5), 610-623.
- Thatcher, D. C. (1986). Promoting learning through games and simulations. *Simulation and Gaming* (September 1990).
- Thiagarajan, S. (1973). *Viewpoints: Current trends in simulation/gaming* (No. Volume 49, Number 6). Bloomington, Indiana: School of Education, Indiana University.

- Thiagarajan, S. (1992). Using games for debriefing. *Simulation and Gaming*, 23(2), 161-173.
- Thiagarajan, S., and Stolovitch, H. (1978). *Instructional simulation games* (Vol. 12).
Englewood Cliffs, NJ: Educational Technology Publications.
- Thiagarajan, S., and Stolovitch, Harold D. (1980). Frame games: An evaluation. In R. E. Horn, and Cleaves, Anne (Ed.), *The guide to simulations/games for education and training* (4th ed.). Beverly Hills, CA: Sage Publications.
- Thomson, G. and Dass, P. (2000). Improving students' self-efficacy in strategic management: The relative impact of cases and simulations. *Simulation and Gaming*, 31(1), 22-41.
- Thorne, Brian. (1992). *Carl Rogers: Key figures in counseling and psychotherapy*.
London: SAGE Publications.
- Treagust, D. & Fraser, B. (1986a). *Validation and application of the College and University Classroom Environment Inventory (CUCEI)*. Paper presented at the Annual Meeting of the American Educational Research Association, 67th, San Francisco, CA, April 16-20, 1986.
- Treagust, D. & Fraser, B. (1986b). *Validity and use of a classroom environment instrument for higher education*. Paper presented at the Annual Meeting of the National Association for Research in Science Teaching, 59th, San Francisco, CA, March 28-April 1, 1986.
- Utterback, N. K. (1985). *An approach to teaching secondary school English based on the humanistic concepts of Carl Rogers*. Unpublished PhD Dissertation, The University of Akron, Akron, OH.

- Vahala, M. E. & Winston, R. B., Jr. (1994). College classroom environments: Disciplinary and institutional-type differences and effects on academic achievement in introductory courses. *Innovative Higher Education*, 19(2), 99-122.
- Van Manen, M. (1990). *Researching lived experience*. London: The State University of New York Press.
- Van Manen, M. (2002). *Phenomenology online*. Retrieved January 2, 2005, from <http://www.phenomenologyonline.com>
- Walker, S. (2003). *Distance education learning environments research: A short history of a new direction in psychosocial learning environments*. Paper presented at the 8th Annual Teaching in the Community College Online Conference, Kapi'olani Community College & University of Hawaii.

APPENDIX A

Rules for Leisureopoly

1. Elect a **Public Relations Spokesperson** for your agency. All group members should discuss issues and make decisions, but only the spokesperson's responses will be recognized.
2. Elect an **Accountant/Budget Director** for your agency. This person is responsible for managing the budget and keeping track of the agency's purchases and sales. At the end of the "business day", the accountant is responsible for turning in the file folder. Your file folder will contain budget sheets, amenities, assets/cash, and any notes you take.
3. **All group members** are responsible for making wise decisions about the management of programs and facilities to ensure quality services are being provided.

ATTENDANCE: The business day starts at 10:15a.m. SHARP!!!! Beginning on DAY ONE, your agency will receive \$25,000 for each employee who is on time. Your agency will have to pay \$25,000 for each employee who is late or absent.

To Begin:

1. Decide who you will serve, what kind of business you will be, and how you will operate. Make sure all employees have a basic idea about the goals of the business.
2. Write a mission statement for your agency based on the type of organization you are (federal, state, local, nonprofit, commercial, specialized).
3. Identify how your agency is funded.
4. Your Public Relations Spokesperson will announce your agency and read your mission statement in a public forum.
5. You will receive \$1 million dollars to start your business only after you have correctly identified how your agency is funded.

Basic Rules:

1. The group with the highest roll will go first, and then we will proceed clockwise around the room.
2. You should not use any notes, books, or other sources to play the game. Of course, you may review your notes before, after, and in-between workdays. If your group decides that you are unable to answer a question without the help of notes or your book, then you must pay \$25,000 each time you need to refer to additional sources.
3. 1 coin = \$25,000
4. Remember your mission statement!! It serves as your guide for decision-making!

Playing Leisureopoly:

1. On Day ONE: You will have the opportunity to begin setting up your agency. Play will begin with the purchase of amenities through an auction. Half of the amenities will be up for bid. The highest bidder wins the amenity. Before ownership is transferred to your agency, the Public Relations Spokesperson must justify the purchase of the amenity. The government (Barbi!) reserves the right to refuse transfer of ownership.
2. The other half of the amenities will be for sale throughout the play of the game. You may purchase them at any time, as long as it is your turn to roll. New amenities will not be added to the game. Once they are sold, they are sold. You may do business with other agencies by buying or selling any of each other's amenities. Only one transaction can occur per roll.
3. Once half of the amenities have been auctioned, we will begin rolling the die. Within your group, you may take turns rolling the die, or you may designate one person.

****NOTE: Only when it is your group's turn to roll can you make decisions about buying/selling/trading amenities. You must make these decisions BEFORE you roll! If you roll and then change your mind, it is too late. Your group will have to wait until your next turn. Communicate with the person rolling the die.**

4. If you decide to make any changes or upgrades to your amenity, then it will cost you money. You will have to work out your deal with the government when it is your turn to roll.
5. Based upon the number you roll, you will select a "card" from the projector screen. You may choose questions from Level 1 (easy) to Level 5 (difficult). Every group, including yours, must follow the directions on the card and answer the question you've chosen. This might help you gain an advantage over other groups if you know their weaknesses. The government determines how long you can work on a card before you must submit an answer. "Cards" are organized like this:

Roll a "1": Advertising/Marketing Card

Roll a "2": Community Voice Card

Roll a "3": Theory Card

Roll a "4": Management Card

Roll a "5": Quiz Card

Roll a "6": Financial Card

6. It is important to listen to all of the groups when they respond to a card or make business transactions. You need to know what your competition is up to!
7. The winner is the agency that completes its mission statement at the end of the game (6th day). Missions vary...commercial agencies need to make a profit; non-profit agencies need to break even; etc.
8. On the last business day, you will evaluate your group members' contributions towards helping your agency achieve its goals. This will be part of their professional courtesy points.

APPENDIX B

PRT 152

HW # 4: Reflection Assignment

Describe your experience being a student in this class this semester.

Think about what you have done as a student in this class. Provide *specific* details and examples to help your reader understand what it's like to be a student in this particular PRT 152 class. You may decide to discuss things you liked, didn't like, how you felt, what you thought, what you will remember, what you learned, what you wished you learned, what you did well, what you could have done better, what you would do again, what you wouldn't do again, etc.

Your reflection paper should be:

- 1 page single-spaced or 2 pages double-spaced
- 1 inch margins
- No cover page necessary, but be sure to put your name on your assignment

APPENDIX C

Consent Letter

Dear Student,

As part of this PRT 152 course, you have participated in several different types of teaching and learning activities. The purpose of these activities was help you learn more about the Parks, Recreation, Tourism and Sport Management profession and the philosophy of leisure and recreation in enhancing people's quality of life.

Your instructor intentionally designed activities in many ways to determine which types of teaching techniques help you learn best. The entire structure of the course this semester was designed to help your instructor become more aware of the teaching and learning process and how students respond to certain types of teaching techniques.

Your instructor would like to use your experiences and assignments from this class as part of her research. Everything you have said and done as part of this course will be kept completely confidential. Your name and identity will never be revealed to anyone other than the instructor.

In order for your experiences and assignments to be used in the study, you will need to give your consent. By signing below, you have given permission for your experiences and assignments to be used in the research project. If you do not give consent, you're your experiences and assignments will not be included in the study. **Your grade in this class will not be affected whether or not you choose to give consent. The instructor will not know whether or not you gave your consent until after final grades have been submitted.**

Thank you for your cooperation.

- Yes, I give the instructor permission to use my experiences and assignments for the research project.

Printed Name _____

Signature _____

- No, I do not want my experiences and assignments to be used for the research project.

Printed Name _____

Signature _____

APPENDIX D

Personal Time Journal Assignment

Objectives:

1. Students will complete a personal time journal for one week (7 days)
2. Students will define key concepts from Chapter 2
3. Students will analyze their journal based upon class discussions and Chapters 1 and 2.

Assignment Due Dates:

Begin your journal at 10:00 a.m. on Monday, January 24th.

End your journal at 10:00 a.m. on Monday, January 31st.

Your journal and paper are due at the beginning of class on Friday, Feb. 4th (Peer Review)

Your final draft is due on Wednesday, February 9th.

Assignment Details:

1. Keep an accurate account of how you spend your time for seven consecutive days, 24 hours each day. Your journal must be kept in at least 30 minute blocks of time. An entry may be more than 30 minutes, but it cannot be less than 30 minutes. Your journal does NOT have to be typed.

Example: Tuesday, January 19th:

9:00-10:00a.m.: In Class (PRT 152)

10:00-10:30a.m.: Break. Met friends at Brueggers for snack.

10:30-12:00a.m.: Studied at the library

12:00-1:00p.m.: Ate lunch

1:00-5:00p.m.: Work at my job at the mall

5:00-5:30p.m.: Drive home

5:30-6:30p.m.: Watch TV

6:30-8:00p.m.: Study

8:00-10:00p.m.: Watch TV

10:00-10:30p.m.: Get ready for bed; pack lunch for tomorrow

10:30p.m.-8:00a.m.: Sleep

2. Review your journal on Monday, January 31st after your last journal entry. Go back through your journal and categorize your activities into 4 areas:
 - A. Leisure/Recreation
 - B. Work
 - C. Education
 - D. Life (sleeping, eating, hygiene, etc)
3. Calculate the total number of hours spent in each category and then calculate percentages of time spent in each area. Example: Total number of hours in 7 days = 168. If I spent 20 hours of the week working, then I would calculate the percentage by:
20 hrs. divided by 168 total hrs. = $.119 \times 100 = 11.9\%$.
Conclusion: I spent 12% of my time working.

Format for the Time Journal Reflection Paper

Part I:

Determine how much time (hours and percentages) you spent in each of the 4 areas:

- A. Leisure/Recreation
- B. Work
- C. Education
- D. Life

Part II:

Using your textbook and additional sources as needed, define “leisure” and “recreation” and “work” and explain how they relate to your journal.

Then, address the following questions, specifically related to your LEISURE/RECREATION time:

1. Was this a typical week for you? Why or why not?
2. Looking at Nash’s Leisure Pyramid, how can most of your leisure time be categorized?
3. How many hours did you spend alone?
4. How many hours did you spend with others? Who were they? What is their relationship to you?
5. Was there an experience you thought you would enjoy, but didn’t? Why?
6. Were there any activities you would have liked to have participated in, but you couldn’t? Why couldn’t you?
7. Did you notice any “wasted” time? Why do you think it was wasted?
8. Are you happy with the way you spend your time? What can you do to improve how you spend your time?

Part III:

Provide a concluding paragraph to summarize how you felt about having to keep up with your time for one week. Was it an “eye opening” experience? Did you learn anything new about yourself through this activity? Do you think you have achieved a healthy balance between leisure and work?

Your paper should:

- Be typed & double-spaced
- Be 3-5 pages, depending on your writing style
- Have 1 inch margins
- Have a cover page with your name, date, class, and title of the assignment
- Be stapled prior to coming to class
- Citations should be properly references using APA guidelines
- Attach a references page