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Application-based learning: How community college business students learn to apply knowledge to their professional employment

by

Joe Hanson

A dissertation submitted to the graduate faculty in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

Major: Education (Educational Leadership)

Program of Study Committee: Larry Ebbers, Major Professor Cheryl Hausafus Robyn Johnson Dan Robinson Mack Shelley

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2008

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DEDICATION

To my wife Stacey, who has always displayed the utmost confidence in my ability to achieve my dreams.



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CHAPTER 1. INTRODUCTION

Statement of the Problem

Community college students in business are ill-prepared when it comes to learning to apply the knowledge gained in their business coursework to their professional employment post-graduation from the community college. This problem was highlighted in a study by Jungst, Licklider and Wiersema (2003) in discovering that "Students complain that they don't see the relevance of classroom material to what they want to do for the rest of their lives" (p. 70). There exists a genuine concern over the ability to learn to apply the knowledge gained through college coursework to the professional employment situations entered upon graduation from the community college.

There appears to be a disconnect between the material being presented in college courses and the student's ability in learning how to apply this material to their professional employment. Participants in a study by Maina (2004) shared a common view that "...learning can only take place when it is meaningful, it is real, and is an extension of the learner's world" (p. 4). This finding helps to describe the perspective of students with regard to their ability to learn how to apply the material that is being presented to them. Nicaise, Gibney and Crane (2000) summarize the problem of applying knowledge by stating "Because many schools are structured in ways that hinder learning, most of what is learned in schools is soon forgotten" (p. 79).

Purpose of the Study

This study focused on application-based learning to understand how community college business students learn to apply knowledge to their professional



employment. According to Newmann, Marks, and Gamoran (1996), "...construction of knowledge involves application, manipulation, interpretation, or analysis of prior knowledge to solve a problem that cannot be solved simply by routine retrieval or reproduction" (p. 286). How students learn this application of knowledge from the course content is the focus of this research study. Specifically, this study sought to gain an understanding of how community college graduates in business learn to apply the knowledge they gained to their professional employment. Obtaining rich descriptions from the participants concerning what they felt had influenced their ability in learning how to apply the knowledge they have gained throughout their business coursework at the community college was paramount to this research study. By gathering and examining these participant perspectives, a greater appreciation and understanding was gained with regard to how students learn to apply knowledge in actual employment situations.

The community college in this study is located in a large metropolitan area and serves over 20,000 full- and part-time students. The college has multiple campus locations situated in and around a large metropolitan city in the Midwest. The participants in this study have earned the degree of Associate in Arts, Associate in Science, or Associate in Applied Science, or a certificate within the area of Business Administration. Additionally, these participants were currently working or had recent work experience in a professional employment setting related to their business coursework completed at the community college.

This study utilized a qualitative research methodology to gather the data. This approach was used to capture the viewpoints of students regarding how they



learned to apply the knowledge they gained through their business courses at the community college. The qualitative research approach allows the students to share their viewpoints on the subject while at the same time gathering rich descriptions about the phenomenon being studied. Capturing these perspectives directly from the participants, in their own words, will provide a thorough understanding of how students learn to apply the knowledge they have gained.

Research Questions

In forming the research questions for this study there was a dominant emphasis on how students learn to apply knowledge to actual employment situations experienced by the participants in the study. There is also a focus on how the student's ability in learning how to apply knowledge was influenced during their business coursework at the community college. The questions directing this research study include the following:

- 1. How did community college graduates in business learn to apply the knowledge gained in their business classes to their professional employment?
- 2. How are community college graduates in business able to relate the business course material to their professional employment?
- 3. What influenced the ability of community college graduates in business to apply the business course material to their professional employment?

These questions will provide the necessary direction for this research study to gain a better understanding of how students learn to apply knowledge in professional employment settings. Furthermore, these questions seek to acquire characteristics

of the student's community college experience that impacted their ability in learning to apply the knowledge they have gained.

Definition of Terms

There are several terms used throughout this study that require a definition to understand how these terms are being used within this study. The definitions of these terms are as follows:

Application-based Learning – the use of examples from the instructor's experience as well as the experiences of others to help students apply the course material.

Real-world Learning – the use of actual situations as examples of how to apply the course material to settings and situations that are currently happening or will be experienced by the students upon entering the workforce. Often used interchangeably with application-based learning.

Authentic Learning – educators provide meaningful opportunities and appropriate support for all students to engage in self-directed inquiry, problem solving, critical thinking and reflections in real world and creative contexts. (State University of New York at Oswego School of Education Conceptual Framework, 1998) Often used interchangeably with application-based learning.

Community College Graduates – includes those who have been formally awarded a degree, diploma or certificate from the community college.



- Business Students refers to students within the discipline of Business

 Administration, including such areas of emphasis as: Marketing,

 Management, Supervision, Accounting, Entrepreneurship, and Sales.
- Associate in Science Degree (AS) a college transfer degree incorporating additional career specialization during the first two years of college.
- Associate in Applied Science Degree (AAS) include particular coursework for the chosen degree as well as some core general education courses.
- Professional Employment a career within a field that is related to the studies undertaken at the collegiate level.
- Course Competencies components of the course content that the student should learn by completion of the course.

Theoretical Framework

Theoretical framework is defined by Crotty (1998) as "the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria" (p. 3). The theoretical framework employed for this research study was interpretivism. Merriam (2002) explains this approach in stating "Learning how individuals experience and interact with their social world, the meaning it has for them, is considered an interpretive qualitative approach" (p. 4). The purpose of this study was to gain an understanding from the viewpoint of the individual's actual experience as it relates to learning how to apply knowledge. Therefore, an interpretivist approach was appropriate to obtain the perspectives from the students involved in this study.

There are some existing theories associated with application-based learning such as authentic learning, problem-based learning and experiential learning. Each of these theories contains learning activities or techniques that provide an opportunity for students to apply the course material they are learning.

Understanding how students learn to apply knowledge is the focus of this study so it will be helpful to briefly explore these associated theories.

Authentic learning is described by Cronin (1993) in stating, "The point of authentic learning is to let students encounter and master situations that resemble real life" (p. 79). Therefore, the application of course material to real life situations allows the student an opportunity to apply the material they are learning. Maina (2004) mentioned the role of authentic learning in the classroom by saying, "Learners need to be active participants in knowledge construction" and "Ultimately, the learner should be able to 'apply whatever is learned to new things, new phenomena'" (p. 5). Learning how to apply knowledge gained through business coursework at the community college to professional employment settings relates to the authentic learning approach.

Also related to the concept of application-based learning is the theory of problem-based learning (PBL). In problem-based learning Stepien and Gallagher (1993) state, "...students learn how to use an iterative process of assessing what they know, identifying what they need to know, gathering information, and collaborating on the evaluation of hypotheses in light of the data they have collected" (p. 25). The problems that are selected for this approach are based upon real-world experiences that relate to the course material or that the students will encounter in

their professional employment. Alessio (2004) stresses the use of problem-based learning by saying, "The primary reason for implementing PBL into the curriculum was to better prepare students for real-world problem solving" (p. 24). This preparation for real-world problems as part of the problem-based learning approach correlates very well to the application-based learning approach.

One more theory associated with the application-based learning approach is experiential learning. Wharton and Parry (2003) define this theory by saying, "...experiential learning strives to give students the opportunity to put into practice the theories they learn in the classroom" (p. 57). Experiential learning emphasizes incorporating a variety of activities that will assist in simulating experiences in which the course material can be applied. By providing these activities, according to Wharton and Parry, the student will be "...forced to confront real problems and to use their own creativity to find solutions" (p. 63). A student's ability to use the material they are learning in the classroom to solve real problems displays a relationship to an application-based learning approach.

Delimitations to the Study

This study is delimited to community college graduates who focused their studies within the area of business administration. The business coursework provided at the community college has the potential for immediate application to a professional employment career in a related field. Therefore, business graduates are rich subjects for this research study. For example, discussions in a management course about relating to co-workers will have instant applicability potential for students in their professional employment. Since these participants possess the

opportunity for immediate applicability of knowledge gained, business graduates were chosen as the participants in this research study.

An additional delimitation is that these students are recent graduates from the community college. Specifically, the students in this study graduated in the Fall 2006, Spring 2007, or Summer 2007 semester. The study was delimited in this way to have recent community college graduates. Employing the use of recent community college graduates should enhance their ability to recall subject material from their business coursework in relation to how it applies to their professional employment. Their community college experience is fairly recent which should assist them in recalling specific examples from their business courses and how certain characteristics of the course (i.e., assignments, discussions, other students, quizzes/exams, activities, instructor characteristics, classroom environment, etc.) influenced their ability in learning how to apply knowledge to their professional employment.

One more delimitation is that the participants were currently employed or had recently been employed in a job related to their business coursework. This research study was delimited in this way to understand how community college graduates learn to apply the knowledge they gained in their business classes to their professional employment. Utilizing current or recent employment experiences should help to enhance the recall of specific examples from the research participant.

Limitations of the Study

All of the participants in this study were solicited from one public community college situated in a metropolitan setting in the Midwest. There may be differences



for graduates who have attended a private community college or technical college. Findings may also differ if the students were solicited from colleges existing in rural settings versus the metropolitan setting utilized in this study.

This study was also limited based on the manner in which potential candidates were gathered for this study. The participants for this research study were sought by asking the instructors within this community college to announce this study to their classes prior to graduation. The goal of making this announcement was to identify those students who would be interested in volunteering to be a part of such a study. Employing more of a random selection process may lead to a more diverse pool of students and possibly generate different views on the subject of application-based learning.

Ethical Considerations

As with any research study involving human beings, there were some ethical considerations that needed to be discussed. A primary ethical concern is that the students in this study participated freely and were not forced to take part in this research study. This ethical consideration was addressed through the use of a consent form that clearly described the research study in which they were asked to participate. The consent form also provided the participants with the opportunity to refuse participation in this study.

An added ethical consideration concerning the human subjects participating in this research study was protecting the identity of the students. To address this concern, pseudonames were used in place of the actual names of the students. Not only does this keep the participant's identity hidden from the reader, it also provided

a safe environment for the students to share their true feelings without fear of being identified to the reading audience.

This research study also attended to the ethical considerations of the community college from which the participants were solicited. Before being allowed to gather the names and contact information of the students in this study, I requested permission from the community college. The request was granted, which allowed the opportunity to solicit business students who were about to graduate. The community college involved in this study also has a right to its privacy. Therefore, instead of referring to the institution by its proper name, it was referred to as the community college.

Significance of the Study

A fundamental reason for the existence of institutions of higher learning is the ability to produce graduates with the capacity to apply the knowledge they have gained throughout their coursework to their professional employment. Various stakeholders (i.e., students, faculty, employers, etc.) have a significant interest in how institutions are able to foster a student's ability in learning how to apply what they have learned. The findings of this study should provide institutions with a greater understanding of how application-based learning can assist them in meeting the expectations of their various stakeholders.

Furthermore, the findings of this study could impact the overall manner in which teaching and learning is viewed. Understanding how students learn to apply knowledge can impact not only the activities in the classroom but also the manner in which institutions address the overall educational needs of its students. According to

Caudron (2000), "Without an understanding of how adults learn, too many trainers have taught people the way they were taught as children – by talking at their students from the front of the classroom" (p. 54). This type of approach works in direct opposition to the objectives of an application-based learning approach.

This study could also have significance for students choosing to pursue their education at the collegiate level. These students are coming to the community college and other institutions to get prepared for their eventual professional employment. Caudron (2000) echoes this sentiment by saying "When I asked people what made training most effective for them, they answered that it 'had to be real'. It had to take into account their perspectives and experiences, and have relevant and direct application to their work" (p. 55). Utilizing an application-based learning approach to teaching and learning may be able to meet this need on the part of our students.

Expected Outcomes

One outcome expected as a result of this research study was a deeper understanding concerning the subject of application-based learning. Specifically, how students learn to apply the knowledge they gained from their business coursework at the community college to their professional employment was an expected outcome of this study. This understanding was constructed via the shared perspectives of the students who participated in this study as they spoke about their experiences at the community college.

Another outcome that was expected was an identification of those characteristics that influenced a student's ability in learning to apply knowledge



gained through their business coursework. These influencers included both positive and negative characteristics of the community college experience for the students within their business coursework. The positive characteristics were those that enhanced the graduate's ability in learning to apply the knowledge gained through their business coursework to their professional employment. The negative characteristics were those attributes that hindered the graduate's ability in learning to apply knowledge gained through their business coursework at the community college.

Summary

A primary purpose of institutions of higher learning is to provide instruction and training for students to eventually enter professional employment. Merely reading the course textbook and memorizing the terminology to be successful on test day does not necessarily relate to success on the student's first workday. Application-based learning environments emphasize how the course material will be incorporated in actual employment settings. This provides students assistance in preparing for their professional employment careers post-graduation from the community college.

CHAPTER 2. LITERATURE REVIEW

To understand how students learn to apply the knowledge they gain through their business coursework at the community college it is important to examine the existing literature related to this subject. Throughout the literature there are discussions concerning how people learn, how to use applications to influence learning, as well as existing methods that are employed in the classroom.

Conducting a review of the prevailing literature provides a foundation from which to understand the process of how learning to apply knowledge occurs. To comprehend the concept of application-based learning, it is important to approach the issue from the perspective of how it relates to the scholarship of learning that already exists within our institutions of higher education.

Teaching Paradigms

Institutions of higher learning have long and storied histories associated with their collegiate offerings and learning environments. Unfortunately, many institutions also engage in an approach to learning that has gone very much unchanged over the life of the institution. Johnson, Johnson, and Smith (1998) refer to this as the old paradigm of teaching in which instructors view their primary role existing within the following endeavors:

- 1. Transferring knowledge from instructor to students
- 2. Filling passive empty vessels with knowledge
- 3. Individuals learn and are motivated to do so by extrinsic rewards
- 4. Classifying and sorting students into categories

- Conducting education within a context of impersonal relationships among students and between instructors and students
- 6. Maintaining a competitive organizational structure
- 7. Assuming that anyone with expertise in their field can teach without training to do so (pp. 6-7)

This old paradigm operates under some assumptions that are not necessarily representative of today's student. According to Johnson, Johnson, and Smith (1998) "The tradition of the old paradigm is carried forward by sheer momentum, while almost everyone persists in the hollow pretense that all is well" (p. 7). This momentum could be a result of the traditions of the institution, the instructor's personal beliefs or many other reasons. However, this momentum is something that is very hard to oppose for those instructors who want to take a different approach to teaching and learning in their own classrooms. Johnson, Johnson, and Smith (1998) summarized this point in saying "Not wanting to appear unfit or stupid, faculty members conform to the current consensus about instruction and are afraid to challenge the collective judgment of how best to teach" (p. 8). This collective judgment has considerable influence on the learning that takes place in our colleges and universities. Discussion in the literature, that will be addressed later, examines methods instructors can employ to avoid the old paradigm of teaching.

Johnson, Johnson, and Smith (1998) offer a new paradigm for teaching in which instructors will view their role with a changed focus toward the following:

 Knowledge is constructed, discovered, transformed, and extended by students



- 2. Students actively construct their own knowledge
- Learning is a social enterprise in which students need to interact with the instructor and classmates
- 4. Faculty effort is aimed at developing students' competencies and talents
- Education is a personal transaction among students and between the faculty and students as they work together
- 6. All of the above take place within a cooperative context
- 7. Teaching is assumed to be a complex application of theory and research that requires considerable instructor training and continuous refinement of skills and procedures (pp. 9-12)

This new paradigm is significantly different from the old paradigm and has an intentional focus on the student and their learning. This allows the student to take a more active role in their own learning as opposed to the passive role many have been conditioned to assume under the old paradigm.

How We Learn

Throughout the literature on teaching and learning there are a variety of approaches that explain how people learn. In some instances the learning focuses on the material being presented in a course as stated by Tomlinson and Germundson (2007), "Curriculum centers on a search for meaning" (p. 31). There are other discussions in the literature that focus on the instructor as a key contributor to learning as stated by Harward (2007) in saying "Most faculty recognize that they have considerable influence on the choices and behaviors of young adults, and most want to help create positive contexts for learning..." (p. 12). Additional literature

focuses on the learners themselves in determining how we learn. Caudron (2000) states her findings in relation to how people learn in saying "The most unforgettable and transformational learning experiences occur through personal experience, group support, or mentoring" (p. 54). According to the National Research Council (2000), "Fundamental understanding about subjects, including how to frame and ask meaningful questions about various subject areas, contributes to individuals' more basic understanding of principles of learning that can assist them in becoming self-sustaining, lifelong learners" (p. 5). The existing literature on how people learn provides the foundation for discussing the various techniques employed to stimulate learning in our colleges and universities.

Learning as Memory

Learning is often viewed in terms of memory and our ability to recall the information necessary for decision making and evaluation in our everyday lives.

Sprenger (1999) states that "...learning is memory, and the only evidence we have of learning is memory..." (p. 62). Sprenger addresses the subject of learning and memory from five areas in which we store memories and, in essence, achieve learning. Sprenger discusses these five areas of memory in learning as lanes comprised of the following:

- Semantic Memory information is learned from words (i.e., textbooks, lectures, etc.)
- 2. Episodic Memory deals with locations, recalling where you were when the learning actually took place

- 3. Procedural Memory processes that the body does and remembers (i.e., riding a bike, driving a car, etc.)
- Automatic Memory triggered by certain stimuli (i.e., hearing a song, sights, smells, etc.)
- Emotional Memory experiences making you happy, sad or any other feelings

These lanes of memory provide unique insight into the way in which we process and store information and the manner in which we recall the information we have gained. Sprenger continues on to say that "...the more memory lanes we use to store information, the more powerful the learning becomes" (pp. 62-63). This could provide credibility to the instructor using a variety of techniques in the classroom that will enhance the opportunity for learning to occur. Sprenger affirms this in saying "Teaching to multiple memory lanes makes the connections to those experiences stronger and easier to access" (p. 63). This seems to be appropriate advice for the instructor who is tasked with the responsibility of reaching many different learners at varying levels of familiarity with the course material.

Bloom's Taxonomy

Bloom (1956) addressed the issue of learning with his taxonomy of educational objectives for the cognitive domain. This taxonomy explored various types of learning that may take place on the part of the student. Bloom's taxonomy is comprised of six categories of learning:

 Knowledge – recall of specifics and universals, the recall of methods and processes, or the recall of a pattern, structure, or setting.



- 2. Comprehension type of understanding or apprehension such that the individual knows what is being communicated and can make use of the material or idea being communicated without necessarily relating it to other material or seeing its fullest implications
- Application use of abstractions in particular or concrete situations. The abstractions may be in the form of general ideas, rules of procedures, or generalized methods
- 4. Analysis breakdown of a communication into its constituent elements or parts such that the relative hierarchy of ideas is made clear and/or the relations between the ideas expressed are made explicit
- 5. Synthesis putting together of elements and parts so as to form a whole. This involves the process of working with pieces, parts, elements, etc., and arranging and combining them in such a way as to constitute a pattern or structure not clearly there before
- Evaluation judgments about the value of material and methods for given purposes (pp. 201-207)

These six categories are not necessarily presented in a hierarchical sequence since learning doesn't have to progress from one category to the next in order for learning to occur. Rather, each category individually can assist in enhancing the learning environment of our students. There are instances in which the knowledge category will be especially important. For instance, in the study of medicine it will be vitally important that future medical doctors possess key facts such as target heart rates and cholesterol levels based on the characteristics of their patient. Furthermore, the

evaluation of a particular subject based on the values and opinions possessed by the individual may lead them to the acquisition of new knowledge or new applications of the knowledge they already possess (Bloom, 1956).

Expert v. Novice

The manner in which we learn is also impacted by the relationship that exists between the instructor and the student. This relationship is often viewed by labeling the instructor the expert while the student operates as a novice. The National Research Council (2000) summarized some key principles regarding the relationship between experts and novices and how this relationship impacts teaching and learning in the classroom:

- Experts notice features and meaningful patterns of information that are not noticed by novices
- 2. Experts have acquired a great deal of content knowledge that is organized in ways that reflect a deep understanding of their subject matter
- Experts' knowledge cannot be reduced to sets of isolated facts or propositions but, instead, reflects contexts of applicability: that is, the knowledge is conditionalized on a set of circumstances
- Experts are able to flexibly retrieve important aspects of their knowledge with little attentional effort
- 5. Though experts know their disciplines thoroughly, this does not guarantee that they are able to teach others
- 6. Experts have varying levels of flexibility in their approach to new situations (p. 31)



This relationship that exists within the roles of expert and novice could influence the

instructor to come out of their expert role to understand the learning position of their students more fully. These students are entering the course with little or no knowledge of the content matter in which the instructor has already mastered. According to the National Research Council (2000), "Expert teachers know the kinds of difficulties that students are likely to face, and they know how to tap into their students' existing knowledge in order to make new information meaningful..." (p. 49). By knowing the difficulties the students will most likely encounter, the instructor is able to refer to what the student already knows to enhance their knowledge base and assist them in creating some meaning from the new information they have gained.

Knowledge Transfer

Discussions of learning found in the literature also address the issue of transfer of knowledge. This refers to the transfer that takes place from learning in a classroom environment to the actual utilization of the knowledge gained in real-life situations. Establishing a focus on equipping students to make such transfer of knowledge is paramount for institutions of higher learning. Johnson, Johnson, and Smith (1998) address this importance by saying "What matters, of course, is not whether or not it will be on the exam but rather do professionals in practice use the concept or procedure regularly" (p. 8). A similar sentiment was expressed by the National Research Council (2000): "...the ultimate goal of schooling is to help students transfer what they have learned in school to everyday settings of home, community, and workplace" (p. 73).

Based on the literature, it appears the subject of knowledge transfer carries a significant level of importance in relation to the learning that occurs in our colleges. An application-based learning approach is concerned with preparing students to make these transfers of information, not only to gain a working comprehension of the course content but to eventually apply what they have learned to professional employment settings. As instructors, there are many techniques that could be employed in the classroom to enhance the student's ability to make this transfer of knowledge. Some of the more prominent techniques will be discussed through the review of existing literature related to the topic of application-based learning.

Application-based Learning

In reviewing the available literature concerning the subject of application-based learning, there were some discussions of this approach in practice. There were different approaches used to incorporate application-based learning in the classroom. Some of the methods in which the application-based learning approach was utilized in classroom settings include applications based on problems (Alessio, 2004; Stepien & Gallagher, 1993; Wharton & Parry, 2003), applications based on popular culture (Blythe & Sweet, 2003) and applications based on personal experiences. (Johnson, Johnson, & Smith, 1998; Newmann and Wehlage, 1993).

Application of Knowledge Using Problems

The use of problems presented to the class to show how to apply course material has been applied across many different disciplines in colleges and universities. According to Alessio (2004), "...real-world problems are often presented in the field of accounting, where, for example, an accountant is presented with a



stack of paperwork and is asked to prepare a balance sheet or journalize a transaction" (p. 24). The idea behind this application is to provide the students with a problem in which they are to find a solution based on the information presented to them in the problem. Alessio (2004) states the underlying reason for utilizing problems in the classroom is "...to better prepare students for real-world problem solving" (p. 24). The students can work on these problems alone or in groups depending on the problem itself and the manner in which the instructor desires to have the problem solved. The purpose of this exercise is to have the students conduct the search and make use of reflective thinking about the solution in which they feel will best solve the problem presented (Alessio, 2004).

After students have been given sufficient time to research the problem and develop their solutions, the instructor can proceed with the course material addressing similar problems. Although this sequence of presenting a problem prior to teaching students how to solve such a problem seems to be backward, it is actually done on purpose. Stepien and Gallagher (1993) refer to this sequence by saying "Students meet an ill-structured problem before they receive any instruction" (p. 26). Teaching the related material after the students have had the opportunity to work on the problem provides the students with the information needed to compare with the solution they have proposed on their own. The students receive a great benefit for their work on the problem presented as stated by Stepien and Gallagher (1993):

In the process of problem solving, students crisscross a variety of disciplines.

They build substantial knowledge bases through increasingly self-directed



study. Through collaboration with their classmates, students refine and enlarge what they know, storing their new knowledge in long-term memory in such a way to promote transfer to new problems. As they move toward solutions, they identify conflicting ethical appeals. And when it is time for resolution, they present, justify, and debate solutions, looking for the best fit. (p. 26)

This problem-based method also provides the instructor with the ability to direct the discussion of the material toward the solutions presented by the students, as well as the appropriate solution for this problem based on the course material. Wharton and Parry (2003) refer to this role of the instructor as more coaching and less directing by stating "Students saw their options and then decided in which direction they would go. Sometimes they made good choices, and, other times, they did not" (p. 63). The idea here is that a student is able to learn from successes and mistakes occurring in the problem solving process while the instructor assumes the role of coach by assisting them without directing them to a given solution.

Application of Knowledge Using Popular Culture

An additional example of application-based learning found in the literature was in the use of popular culture to relate the course material to the students. In these instances the instructor would use subjects such as: music, books, television shows, news stories, movies, and fads to help the students apply the material to areas in which they are already familiar. According to Blythe and Sweet (2003), "Contemporary scholarship in teaching and learning reveals that one of the most effective ways to link students to classroom material is by introducing the material

through references to the world they already know" (p. 1). The idea behind this application is that we, as educators, shouldn't seclude ourselves inside our classrooms but rather should find creative ways to infuse the course material into the popular culture in which our students exist on a daily basis. Blythe and Sweet (2003) state, "...instructors can use pop culture (e.g., movies, television, music, slang, and fads) to build bridges between the course content and the students" (p. 2). By making such connections, educators will be assisting students in the comprehension and transfer of the course material. This will also help to connect the student to the course material and provide them with the opportunity to have a more vested interest in the material being studied, since it is being related to topics in which they are already familiar.

The idea of using popular culture in the classroom is not without its challenges, however. Some faculty members may be hesitant to use this approach due to a feeling that they are not on the same level as their students concerning the current happenings in popular culture. Blythe and Sweet (2003) found "One major objection we've run into over the years with building pop culture bridges is our colleagues telling us they don't know any allusions-they never watch TV, listen to current music, or go to the movies" (p. 3). Therefore, instructors need to do their research in order for the popular culture approach of application-based learning to have a positive impact on their students. Blythe and Sweet (2003) share that this research need not be an extensive or exhaustive process but merely occurs as a normal part of our everyday lives: "...it's almost impossible to read the newspaper or even carry on a water-cooler conversation without some trendy pop reference

appearing (e.g., 'Is that your final answer?'...'Beam me up, Scotty', 'Show me the money!')" (p. 3).

Application of Knowledge Using Personal Experiences

An alternative use of application-based learning in the classroom found in the literature is that of the personal experiences of the instructor or students. Johnson, Johnson, and Smith (1998) address the interaction between students and faculty in saying "The interactions must be personal. Learning is a personal but social process that results when individuals cooperate to construct shared understandings and knowledge" (p. 11). The use of personal experiences provides an opportunity to enhance the credibility to this interaction by sharing something that has been experienced in person.

Personal experiences of the instructor and students can be compared and contrasted to the material being presented in the course to connect the material being covered to experiences in which the instructor or student is already familiar.

Newmann and Wehlage (1993) address this connectedness in saying "...students use personal experiences as a context for applying knowledge" (p. 10). The personal experiences of both the instructor and students shared within the classroom provide a common framework from which learning can occur.

Approaches to Learning

Additional observations in the literature pointed to a belief that instructors will teach their classes in the same way that they learn as noted by Brown (2003) in stating "One reason instructors are led to teach the way they learn is that they are not skilled in adult learning theory" (p. 3). Based on this, instructors will only be



effective in reaching their students as long as the approach to learning for the students is the same as their preferred learning style. This appears to be a misguided approach to creating effective learning environments for students, since not all students will learn in the same manner as their instructors.

Lecture Style of Teaching

Unfortunately, too often instructors teach the way they were taught. In many instances this leads to a heavy reliance on lecture style teaching, which is very different from the application-based learning approach. According to Johnson, Johnson, and Smith (1998) "Professors seem drawn to lecturing, crashing their teaching on the rocks due to the seductive and tempting attractions of explicating knowledge to an adoring audience and teaching as they were taught" (p. 1). This is not to say that lecturing does not have its place in institutions of higher learning. Johnson, Johnson, and Smith (1998) provide the following reasons for why lecturing is still used in colleges and universities:

- 1. Lecturing is an efficient way to present information
- 2. Lecturing is flexible
- 3. Lecturing is relatively simple to implement
- 4. Lecturing makes the instructor the center of all communication and attention in the classroom

The use of lecturing appears to be a paradox of sorts, as it is highly criticized and yet still so prevalent in our colleges and universities (Johnson, Johnson, & Smith, 1998).

The criticisms of a lecture style approach to teaching highlight many inherent problems in using such an instructional method of delivery. Obviously, not all



learners will respond in the same manner when exposed to a lecture style delivery method. Johnson, Johnson, and Smith (1998) have composed the following list of problems associated with a lecture approach to teaching:

- Students' attention to what the instructor is saying decreases as the lecture proceeds
- It takes an educated, intelligent person oriented toward auditory learning to benefit from listening to lectures
- 3. Tends to promote only lower-level learning of factual information
- 4. Lecturing is limited by the assumptions that all students need the same information presented orally at the same time and at the same pace, without dialogue with the presenter, and in an impersonal way
- 5. Students tend not to like it
- 6. It is based on a series of assumptions about the cognitive capabilities and strategies of students (pp. 7-8)

While there is always going to be a need for instructors to disseminate information to their students, the manner in which this dissemination occurs is of primary concern when utilizing an application-based learning approach. As a final thought on lecturing, Johnson, Johnson, and Smith (1998) summarize the main problem with a lecture style approach, "The information passes from the notes of the professor to the notes of the student without passing through the mind of either one" (p. 10).

Teaching and Learning Styles

Within the literature there were discussions on the role and appropriateness of matching teaching styles with learning styles. Spoon and Schell (1998)



"...examined the nature of the learning experience when congruence and incongruence between the learning style of the student and the teaching style of the teacher are evidenced" (p. 42). This study was significant for the discoveries that were made concerning whether or not it was beneficial to the student when their learning style was aligned with the teaching style of their instructor. There were a couple of implications resulting from this study, with the first being "...educating teachers on the importance of developing and using multiple teaching styles depending on the learning styles of students" (p. 42). Obviously, not all learners are created with the same learning style and instructors may need to employ a variety of approaches to their teaching to create the best opportunity for their students to learn the material being presented. A second implication arising from this study is "...multiple techniques for adopting instructional practice to learners' particular stages of development...are required" (p. 42). Thus, it appears that learning styles are not concrete experiences but rather are influenced by characteristics of the learner themselves that have the potential to change over time. Nuckles (2000) added to this discussion in saying "The effective integration of learner characteristics and teaching style produces an optimal learning context" (p. 6).

Brown (2003) also researched the relationship between teaching style and learning style and discovered that "...some students may do better with a learning/teaching style mismatch" (p. 1). The learner being outside of their learning comfort zone may actually provide them with a more effective learning environment. By experiencing this learning/teaching mismatch, the student will become a better learner by having to adjust their learning style to teaching styles outside of their

preference. Brown (2003) addresses this thought by viewing learning as a continuous process where learning is "...occurring over the span of one's lifetime and delivered by a variety of instructors with a variety of teaching styles in a variety of situations, learners need to be able to adjust their cognitive style" (p. 3). This learning experience will most likely create some discomfort on the part of the student, but ultimately should provide long-term benefits for the learner.

Furthermore, this experience should enhance the learner's ability to adapt to the various teaching styles they will encounter to gain the knowledge necessary for their eventual professional careers (Brown, 2003).

The teaching style of the instructor was also a point of discussion discovered within the literature. Brown (2003) states "...before teachers can attempt to develop more flexible teaching styles, they must be receptive to the idea of change, beginning with a change in their beliefs about the students' role in the learning environment" (p. 4). Therefore, instructors should adjust their instructional approach by considering the audience of students they are teaching within their classroom.

The teaching style employed by the instructor is therefore a culmination of styles that are best suited for the particular set of students they are teaching. According to Nuckles (2000), "...the student-centered teacher's characteristic style is an integrated style. This is a blending of the preferred style and acquired proficiencies with other styles" (p. 6).

Authentic Learning

Another point of discussion found in the literature related to application-based learning was the subject of authentic learning. This approach focuses on critical



thinking skills, solving problems, reflection and self-directed investigation by utilizing realistic and imaginative circumstances. Maina (2004) describes the experience of an authentic classroom as one where the "...students are given more ownership over what they learn, and are required to integrate multiple contents and multiple skills holistically" (p. 2). Providing the applications within the context of the course material will help the student to gain understanding. However, it is still the responsibility of the student to understand the connection that is being made with the application. This is especially evident in the use of problems, as it is the student's responsibility to display their comprehension of the material by analyzing and interpreting the key facts of the problem presented to develop and defend their proposed solution based on the knowledge they have gained (Maina, 2004).

The word authentic is also used in the literature to distinguish the level of achievement that is attained by the student. There is a distinction between achievement that is noteworthy and important and achievement that is insignificant and worthless. Three criteria help to define authentic achievement by the student as noted by Newmann and Wehlage (1993):

- 1. Students construct meaning and produce knowledge
- 2. Students use disciplined inquiry to construct meaning
- Students aim their work toward production of discourse, products, and performances that have value or meaning beyond success in school (p. 8)

In addressing the role of the instructor in an authentic classroom, Maina (2004) states "The teacher doesn't have to know everything. Instead, learning is negotiated so that both teacher and learner come to a common understanding" (p.



5). This reinforces the ownership of learning that is placed on the student and allows the instructor to assume the role of facilitator or coach in the learning process.

One more compelling issue addressed in the literature concerning authentic learning was addressed by Cronin (1993) who offered four common misconceptions:

- 1. If you can't take 'em to Spain, they might as well not learn Spanish at all
- 2. If you haven't got your chef's license, then you'll have to starve
- 3. If it isn't real fun, then it isn't real
- If you want to learn to play the piano, you must start by mastering Chopin
 (p. 78)

The first misconception addresses the issue that "...any learning context that is not completely authentic is fraudulent" (p. 78). Often it would be impossible to get truly authentic such as attempting to simulate a nuclear disaster. However, that does not mean that the ability to achieve authentic learning in the classroom is impossible. These seemingly impossible situations may require more creativity to provide some authenticity to the classroom for the students to gain an appreciation for the material being discussed and achieve a greater level of understanding (Cronin, 1993).

The second misconception, according to Cronin (1993), states that "Many of us mistakenly believe that authentic learning is a completely new concept and that teachers must master the process – or get their license, so to speak – to use it in the classroom" (p. 78). Many educators already have experience with authentic learning but may not recognize it as such. Just as we can all cook without the official qualifications of being a chef, we can incorporate authentic learning without lengthy training and planning. Realizing this ability already exists within us may be a

significant challenge for instructors who wish to embark on the use of authentic learning within their classrooms (Cronin, 1993).

The third misconception Cronin (1993) raises is "...tasks that are not original, creative, and fun are not authentic" (p. 79). Instructors with this belief will avoid developing authentic activities for their classrooms because of the perceived amount of work involved in creating such tasks. Some activities that may seem mundane or unimaginative may be perfectly appropriate if it is an activity that the students will encounter once they enter the workforce. Placing an expectation that activities must be exciting and original does not necessarily insure that they will be meaningful or useful to the students (Cronin, 1993).

The final misconception, according to Cronin (1993) is "...all authentic tasks are elaborate and complex, never simple and straightforward" (p. 79). Instructors may choose to believe that authentic tasks could never be simplistic. Therefore, instructors with this belief may choose to pursue authentic tasks that are quite time consuming and involved, thus discouraging them from using these tasks on a regular basis. However, many of the situations encountered in ones daily life are neither convoluted nor involved and can possess the ability to make a meaningful impression on our students as they seek an understanding of the course material. The belief that authentic tasks are difficult will lead to overlooking some very basic opportunities for making learning more genuine (Cronin, 1993).

Basic Interpretive Methodology in Practice

Many research studies seek to understand the perspectives of the participants. This understanding can then be shared with others to enlighten the



audience concerning a particular topic or provide insight into the meaning associated with the topic. No matter the purpose of the study, a research project involving the basic interpretive methodology will remain focused on uncovering meaning and interpreting this meaning within various contexts. The following research studies are highlighted for their use of the basic interpretive methodology. A review of studies employing this methodology should assist in gaining a better understanding of why this methodology is appropriate for the study of how community college business students learn to apply knowledge to their professional employment.

Everall, Altrows, and Paulson (2006) sought to understand how female adolescents prevail over suicidal behaviors. Through the use of basic qualitative inquiry they discovered four areas of resilience: "social processes, emotional processes, cognitive processes, and purposeful action" (p. 461). Furthermore, they discovered that improvement in one of these areas led to changes across other areas, which added momentum to the resiliency progression.

Social processes included "...having consistent support of at least one other significant individual in their lives, either a peer, a parent, or an adult outside the family" (Everall, Altrows, & Paulson, 2006, p. 465). Close friends (peers) were viewed as confidential allies willing to listen to the participants' problems. These peers also provided a source of encouragement for the participants to persist while coping with this hardship. One of the participants found solace in belonging to a church youth group after experiencing a feeling of rejection from her peers. Another participant sought comfort with peers at her workplace. Since she did feel encouraged at home, peers at the work place provided additional support.

Parents were also important members within these social processes. Several participants found a close relationship with one or more parents assisted in their own healing. The participants experienced an environment in which parents were available to talk and the "...parents responded with caring, acceptance and respect" (Everall, Altrows, & Paulson, 2006, p. 465). There were also extrafamilial adults involved in the social processes for the participants. Some of the members of this group included instructors, counselors and psychologists. One of the individuals noted, "...her teacher often noticed when the participant was feeling down and offered to 'be there' if she needed someone to talk to" (Everall, Altrows, & Paulson, 2006, p. 464). Another participant expressed the perception that her teacher focused on her strong points and believed in her ability to be successful.

An additional key area discovered in this study of resilience among suicidal adolescent females was that of emotional processes. These emotional processes included facing difficult feelings, expressing feelings to others and writing. In terms of facing difficult feelings, one participant stated, "It's harder to deal with the feelings and to understand them...than it is just to end your life" (Everall, Altrows, & Paulson, 2006, p. 465). All of the participants expressed feelings of sorrow or depression at the time they were suicidal. A distinct component of the emotional processes was that of expressing feelings to others. This particular process was shared by all of the participants. The opportunity allowed them to share their feelings openly without receiving judgment or premature reassurances, allowing them to address their feelings. Another part of the emotional processes was that of writing. This was apparent in providing participants an opportunity to journal their feelings to gain

clarification of their unique situation. One participant commented on the journaling by saying, it was a "good release and a great way to express myself" (Everall, Altrows, & Paulson, 2006, p. 466).

The next area of discovery in this study was that of cognitive processes.

Firstly, this process included a shift in perspective. The study found this shift to be a more positive perspective on life that was instrumental in overcoming being suicidal. For one participant, this was especially true in her admission of what turned out to be vital was "finding the goodness in life rather than the goodness in death" (Everall, Altrows, & Paulson, 2006, p. 466). There was also recognition of choice and personal control as part of the cognitive processes. This was a progression on the part of the participant to realize they were in control over their lives both internally and externally. One participant summed this up well by saying, "You can choose to be happy" (Everall, Altrows, & Paulson, 2006, p. 466).

The final discovery in this study related to purposeful and goal-directed action. This entailed the participant actually taking action after realizing that they were in control and were responsible for their own actions, including "...the willingness to take charge of one's life and experiment with new behaviors" (Everall, Altrows, & Paulson, 2006, p. 466). Another key component of purposeful and goal-directed action was that of exercising independence. This was a key motivation of the participants as they desired to establish their independence and the ability to make decisions for themselves. Included is the avoidance of friendships involving drugs and alcohol and the forming of new friendships of a positive nature.



Moving toward purposeful and goal-directed action also involved the participants creating a future for themselves. By doing so, the participants experienced an increase in "...self-esteem and confidence in being able to handle whatever challenges came participants' way" (Everall, Altrows, & Paulson, 2006, p. 467). They were also able to experience the joy in finding a purpose for their life. This was accomplished in varying roles from volunteer to paid positions that gave the participants a feeling of usefulness and a reason to continue living.

Parsons, Kinsman, Bosk, Sankar, and Ubel (2001) explored another interpretive research project to study "...how medical students react to and interpret the 'appropriateness' of derogatory and cynical humor and slang in a clinical setting" (p. 544). Through this study researchers were able to determine that these medical students could assume the role of an insider and outsider with respect to the humor and slang used in the hospital based on their reactions to such instances. Various perspectives were seen in both of these roles on the use of humor and slang in such a setting.

The role of outsider was explained as the manner in which students see themselves, as well as empathy for the patient's perspective. The participants in this study were able to see themselves as outsiders due to their position as students within the hospital setting. One student shared this perspective by saying "I think people expect students to be a little bit more idealistic, a little bit less cynical. Some of that is accepted at the intern level, I believe, to a greater extent than at a student level" (Parsons, Kinsman, Bosk, Sankar, & Ubel, 2001, p. 545). Still another student presented the outsider perspective in stating "...as the medical student, the first time

ever in the clinics, it wasn't really my position at all to say things like that in the first place. But the least I could do was laugh" (Parsons, Kinsman, Bosk, Sankar, & Ubel, 2001, p. 545).

The role of outsider was furthered by the participants being able to identify with the perspective of the patients. Still acting as an outsider, the participants could show empathy for the patient's point of view. One participant reacted to the use of the term "...'brick' (a patient who has been in the hospital a long time and is not likely to be discharged soon)" (Parsons, Kinsman, Bosk, Sankar, & Ubel, 2001, p. 545). This participant stated, "I just think that when people use these terms, they're directing them against the patient when it's not really the patient's fault" (Parsons, Kinsman, Bosk, Sankar, & Ubel, 2001, pp. 545-546).

The participants in this study were also able to assume the role of insider with relation to the humor and slang that was being used. There were participants that started to identify with the frustrations felt by the residents and by doing so could see why such behavior was displayed in the hospital. According to one participant, "I'm not condoning it, and I hope I never do it. But having experienced just one month of a sub-I...if an entire year of internship is like that, I can very easily see how you come to the end of your rope" (Parsons, Kinsman, Bosk, Sankar, & Ubel, 2001, p. 546). The insider perspective was also experienced by the feeling of not wanting to pass moral judgment on those that engaged in the activity of using humor and slang. This was evident in the statement from one participant who said, "There are a lot of people who are actually really great with patients, who still occasionally make not-so-sensitive comments about patients. I guess it's something that happens when

people are under stress" (Parsons, Kinsman, Bosk, Sankar, & Ubel, 2001, p. 546). A final discussion of the role of the insider had to do with the active participation in the use of humor and slang as part of being a medical student in a hospital setting. This was clear in one statement from a participant who shared, "I'm as guilty as the next guy. To be accepted, in order to feel part of the team, I've occasionally been talking about patients or laughing at jokes whether they're funny or not" (Parsons, Kinsman, Bosk, Sankar, & Ubel, 2001, p. 547). To some of the participants, this was all part of the orientation process into the culture of the hospital setting.

Stoner and Angell (2006) researched the perspectives from the viewpoint of parents of children with autism spectrum disorder (ASD) regarding their roles in the educational process of their child. The study found that these parents were regularly engaged in the roles of "(a) negotiator, (b) monitor, (c) supporter, and (d) advocate" (p. 177). Researchers in this study sought to understand how parents perceived their role in each of these four functions as they interacted with school officials and monitored their child's educational programs.

The first role was that of negotiator, defined as "...one who brings about desired outcomes through conferences, discussions, and compromises" (Stoner & Angell, 2006, p. 180). This particular role was one that evolved over time for the parents. Within this role, the parent had to learn how to prepare for negotiation with educational professionals and strategize for effective negotiations. The researchers discovered that the parents "...learned how to negotiate, and they understood that how they approached education professionals had a direct influence on the

willingness of education professionals to implement their requests" (Stoner & Angell, 2006, p. 181).

Next came the role of monitor, defined as "...parental actions that involve checking the quality and content of their children's educational programs on an ongoing basis" (Stoner & Angell, 2006, p. 181). Within this role, there were two kinds of monitors, formal and informal. Formal monitoring occurred during regularly scheduled events such as parent-teacher conferences. Informal monitoring occurred in the use of notebooks for communication, parental assistance in the classroom and a general observation of behavioral changes on the part of the child.

The formal monitoring that took place increased in times when the parents exhibited some dissatisfaction with some part of the educational programs for their child. This particular role could become quite intense, as was the case for one set of parents who saw the monitoring role more like policing as opposed to monitoring. They viewed it this way due to a perceived lack of action on the part of the school officials. These parents expressed their feelings by saying "We left them alone for 2 years...we wasted another 2 years, so they can come around, and finally learn or figure out what it is they are finally doing or they are supposed to do. Yes, definitely policing" (Stoner & Angell, 2006, p. 182).

Informal monitoring, on the part of the parents, served multiple purposes according to the researchers. By conducting this research study, it was discovered that four characteristics were present relating to informal monitoring. The researchers stated that:

1. All parent participants used informal monitoring.



- 2. Parents stressed the need for honest and balanced communication between home and school.
- Children's behavior was one of the most reliable monitoring tools the parents used.
- 4. The mothers spent time in the schools to further monitor their children's education. (Stoner & Angell, 2006, p. 182)

The parents viewed the informal monitoring as a way of staying current with the progress of their child and maintain a certain level of access to the child's academic programs.

The next role was that of supporter which was displayed as "...parents encouraging, assisting, or acting as an advocate for teachers" (Stoner & Angell, 2006, p. 183). This role was played by all participants in the study in various forms and levels. Some of the ways in which this role was performed included: "(1) producing classroom material, (2) purchasing items for the classroom and (3) reinforcing classroom intervention strategies in the home" (Stoner & Angell, 2006, p. 183). Not only did these supporting functions aid the teacher in the classroom, but it also assisted the parents in dealing with their child's behavior in the home. This supporting role provided the parents with further opportunity to interact with the educational programs for their children. One parent explained her supporting role by saying "The teachers know that [they can call on me] if they need any kind of help...If they ask me, I will not even hesitate" (Stoner & Angell, 2006, p. 183).

The final role investigated in this research study was that of advocate, which reflects "...parental participation in supplemental advocacy activities related to ASD



beyond those directly affecting the couples' children" (Stoner & Angell, 2006, p. 184). These activities ranged from local support for other parents who had recently received an ASD diagnosis for their child to serving on state and local boards. This research discovered that even though the fathers were not as directly involved in the role of advocate, they remained active with their children at home and supported the activities in which their wives were involved in as part of this advocacy role. This was displayed by one father who stated "And she is really on this crusade to educate herself and be an advocate for the disability and that kind of thing...And she really puts her heart and soul into it" (Stoner & Angell, 2006, p. 184).

Wolfe and Dattilo (2006) provide us with another research study that utilizes the interpretive approach. In this study, researchers sought to gather the perceptions of individuals who attended a one-day workshop on the subject of communication. The study focused on perceptions relating to the effectiveness and benefits of this workshop. Through the use of observations and participant interviews, they were able to identify two major themes, "effectiveness of communication" and "too many chiefs" (p. 126).

The theme of effectiveness of communication was detailed into four subthemes: "(a) group size; (b) activity progression; (c) listening and responding; and (d) multiple talkers" (Wolfe & Dattilo, 2006, p. 133). Group size was identified as impacting the effectiveness of the communication that occurred at the workshop. The overall impression of group size from the standpoint of these participants was that the smaller groups provided an environment that was more effective for communicating. One participant stated the benefit of the smaller group when the

participants "didn't have to deal with as many [people]" while another participant added that it "seemed a lot easier when we were in those little small niche groups" (Wolfe & Dattilo, 2006, p. 134). Activity progression referenced the fact that as the day progressed communication seemed to improve. This may have been due to the processing sessions that were conducted after each activity. One participant spoke to this progression by saying, "...we had a chance to evaluate ourselves and the way we were communicating. So by the time we got here we had gone through all these other things...and established...better communication" (Wolfe & Dattilo, 2006, p. 134). These processing sessions were viewed as an opportunity for reflection and were perceived as enhancing communication.

Additionally, the sub-theme of listening and responding represented those instances when few people were talking while more were listening. When this occurred within the group setting, it was perceived as enhancing effective communication. One participant described this situation in saying, "And people were listening to what I was saying. They had stopped arguing and given me a chance to speak. They were willing to listen to what I had to say..." (Wolfe & Dattilo, 2006, p. 135). The final sub-theme within the theme of effectiveness of communication was multiple talkers which addressed the fact that communication became ineffective when many people were talking at the same time. This situation was perceived as chaotic and disorganized by the participants. One of the participants eloquently depicted this ineffective communication by saying "too many people were talking...nobody was really listening" (Wolfe & Dattilo, 2006, p. 136).



The other theme that developed from this research study was too many chiefs, which evolved out of a comment of one of the participants who said, "too many chiefs and not enough Indians [sic]" (Wolfe & Dattilo, 2006, p. 136). This comment was made referring to the fact that there were many leaders in this group but the number of followers was few. Within this theme came the following subthemes: "(a) problems with decision-making; (b) group confusion; (c) role uncertainty; and (d) failure" (Wolfe & Dattilo, 2006, p. 136).

The sub-theme of problems with decision-making became evident as a direct result of having too many participants attempting to serve in the role of leader for the group. One participant stated "everybody had different opinions...ideas [were] being thrown out" (Wolfe & Dattilo, 2006, p. 137). Another participant addressed this problem in making decisions by stating "Just too many people are 'it's my way or the highway'. They wanted to get that point across to everybody" (Wolfe & Dattilo, 2006, p. 137). With so many participants acting as the leader, coming to a decision for the group was perceived as being very difficult. The next sub-theme of group confusion appeared to be related to that of problems with decision-making, because it also impacted the group's effectiveness in accomplishing the tasks set out for them to complete. The belief of too many leaders created an environment within the group that was chaotic and confusing. One participant related it by saying, "...everybody had their own thing and it was just a lot of chaos at that point. Really there didn't nobody know [sic] what to do" (Wolfe & Dattilo, 2006, p. 138).

The next sub-theme, role uncertainty, was created out of the situation of too many chiefs due to the fact that so many people were trying to assume the role of



leader, which left many others questioning their own role within the group. One participant shares this confusion over roles by saying, "We needed a chief that day....But I didn't know I was elected. I wouldn't have wanted to be elected" (Wolfe & Dattilo, 2006, p. 139). The final sub-theme within the theme of too many chiefs was that of failure. This sub-theme was categorized by too many people trying to assert their thoughts and opinions which would play a part in the group's failure to complete their assigned tasks. In one group there was actually a division of group members who moved toward different leaders in the group, which segmented them and ultimately led to failure of the group as a whole.

A final research study example employing the interpretive approach was that of Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier (2006), who pursued the experiences of women "...living with breast cancer that had returned after conventional treatment" (p. 127). These researchers approached this study from two perspectives relating to the meaning and experience of: returning breast cancer and psychological intervention. Themes that arose out of living with the return of breast cancer included "...self-identity, self-blame, social isolation and feelings of being constrained" (p. 127). Themes emerging within the experience of psychological intervention were "...gaining a sense of control and empowerment, normalizing and re-attribution, and a powerful military metaphor for dealing with the actual cancer" (p. 127).

Living with the return of breast cancer brought out many different feelings on the part of the participants in this study. Self-identity was one such feeling that resonated throughout the group relating to how they viewed themselves after the



cancer had returned. One participant shared her perspective concerning self-identity by saying, "...I remember though...standing on the tube station [underground station] and looking around at other people and thinking...um, I'm different from you..." (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 131). Related to the issue of self-identity was the perception of how others would see them as explained by one participant who said, "I thought they would say, 'well we would [perform surgical procedures] for some people', they'd say 'well look you're not really a girl, you're a half-thing" (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 131). Another component of experiencing the return of breast cancer was the theme of self-blame that was felt by the participants. For some reason, almost all of the participants felt responsible for the cancer returning. One participant stated, "...the first time around, it's total, it's nothing to do with me, something that has happened. This time it's much more to do with me, what I'm doing and what I should be doing" (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 132). Another participant went so far as to trace her responsibility for the cancer returning back to an event from her childhood in saying, "I also said it was my fault, and I really did, because when I was small I bashed into this little girl I didn't like, and I really bashed her bosom" (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 132).

Social isolation was another theme that developed out of the experience of living with the return of breast cancer. One participant described this feeling of isolation in saying "I am more willing to talk about it...I wasn't when it first happened. I couldn't cope with all the questions of concern and all the denial...I told many more friends, and again I lost some of them" (Bennett, Laidlaw, Dwivedi, Naito, &

Gruzelier, 2006, p. 133). Especially in the case of cancer that returned, there was a feeling expressed that isolation would be a result of sharing their disappointing news. One participant shared this feeling by saying "I thought no one would speak to me...that they would catch it or I was some kind of leper, and I couldn't get over it" (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 133). The final theme that emerged out of the experience of living with cancer that had returned was a feeling that the participants were constrained by this condition. This feeling of constraint not only impacted them in the present but also impacted the way they viewed their futures as mentioned by one participant who said "I try to live in the present...but when I was diagnosed I had so little hope — do you know I wouldn't even buy a pair of socks. I thought I'm not going to wear them out..." (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 133).

The second area of focus for this research study related to the meaning and experience of psychological intervention. The first theme emerging within this area was a sense of control and empowerment. This perspective gave the participants a feeling that utilizing an intervention technique allowed them to have a certain level of control over their condition. The researchers summarized this perception as, "Instead of handing control to another person they felt as though they were active agents in their own 'treatment'" (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 135). Another theme related to these intervention strategies was normalization and attribution where the participants were able to perceive a sense of normalcy and more accurately attribute the causes of various physical sensations they experienced. Sharing the view of normalcy one participant stated, "I want to

surround myself with 'normality'" (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 135). Another participant spoke of the attribution perception in saying "I mean at first I put every little ache or twinge or pain at the cancer door, and then you have to stand back and say, hang on, that's got nothing to do with it – that's a toothache!" (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 135). This realization of attribution assisted the participants to use evidence as opposed to emotion in attributing the causes of various physical sensations.

The final theme discovered in the experience and meaning of psychological intervention related to the perception of having a tool that could be used in dealing with their disease. The participants expressed a feeling of power related to the intervention strategy they had available to them. One participant expressed this by saying, "...the fact that I had the secret weapon that I could use. I could do something" (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 136). Another participant shared, "It's a tool that I've got in my bag that's always there...and I can dip back into it, and hopefully that's what I'd really like to do" (Bennett, Laidlaw, Dwivedi, Naito, & Gruzelier, 2006, p. 136).

It becomes apparent by looking at the interpretive studies outlined here that this methodology is effective for gaining the perspectives of participants in a study. This is accomplished by giving the participants the opportunity to voice their experiences and build meaning from these experiences on a uniquely personal level. The voice of the participants provides a powerful tool to understanding the research topic. Furthermore, the participant voice allows the researcher to present their findings from the standpoint of the participants and thus build more credibility into

the findings being presented. By incorporating the use of actual words of the participants in the presentation of the findings, the study comes to life for the reader and allows them to get close to the thoughts and feelings of the participants.

Summary

This chapter discussed the prevailing literature concerning how people learn as well as an exploration into some examples of the basic interpretive research methodology. The literature highlighted discussions on some of the techniques that could be utilized within an application-based learning approach to teaching and learning. Additionally, discussions from the literature concerning learning environments displayed some of the techniques that are used within the classroom that could impact the learning that occurs.

Understanding how people learn provides the appropriate framework for this study concerning how students learn to apply the knowledge they gain as a result of their business coursework at the community college. The literature details a variety of methods in which learning takes place on the part of the student. The variety of ways in which students learn provides the context for the various perspectives shared from the research participants as they discuss the characteristics that influenced their ability to learn how to apply their business course material. Additionally, by reviewing some of the techniques that are employed in an application-based learning approach we are provided with the appropriate framework for how such a method could be utilized within our colleges and universities.



Reviewing the literature relating to the basic interpretive research methodology provides a foundation for conducting a study that seeks to understand how community college business students learn to apply knowledge. In reviewing a variety of research studies incorporating the use of the basic interpretive approach, a greater understanding can be gained as to why this is an appropriate methodology for this research study. The basic interpretive methodology seeks to discover meaning as it is constructed on the part of the participant. Therefore, seeking to gain an understanding of how community college students in business learn to apply knowledge to their professional employment is an appropriate use of the basic interpretive research methodology.



CHAPTER 3. METHODOLOGY

Rationale for the Qualitative Approach

The use of a qualitative research methodology for this research appears to be the most effective to answer the questions in this study. The qualitative research approach assisted in gaining a deeper understanding of how students learn to apply the knowledge they have gained throughout their community college coursework in business. This understanding was the ultimate goal of engaging in the study of this particular topic.

Qualitative research is undertaken for a variety of reasons and can address the research interests of many fields of study. According to Merriam (2002), "Qualitative research is a powerful tool for learning more about our lives and the sociohistorical context in which we live" (p. xv). This search for understanding concerning the lives of others is the major tenet of qualitative research. Sears (1992) portrays this search in saying "At best qualitative inquiry enables us to come to know and honor the meanings constructed by others" (p. 155).

Additionally, the use of a qualitative research approach was paramount in the search for understanding from the standpoint of the students in the study.

Understanding cannot be thrust upon the participants, rather the understanding gained is emanating from the participants themselves as they explore what the research topic means to them in their own lives and unique situations. Therefore, the viewpoint of one student may be quite different or remarkably similar to that of other students. Once the researcher has gained the perspectives of all participants in a

study, they will then have a better understanding of the research topic from various points of view. Merriam (2002) explains this understanding by saying:

The key to understanding qualitative research lies with the idea that meaning is socially constructed by individuals in interaction with their world. The world, or reality, is not the fixed, single, agreed upon, or measurable phenomenon that it is assumed to be in positivist, quantitative research. Instead, there are multiple constructions and interpretations of reality that are in flux and that change over time. Qualitative researchers are interested in understanding what those interpretations are at a particular point in time and in a particular context. (pp. 3-4)

The construction of meaning provides the foundation for this research study of application-based learning and is therefore an appropriate use of the qualitative research approach.

Qualitative research is a fundamental component of studies within the field of education. Bogdan and Biklen (2003) describe data that provide rich images of people, places and conversations that would not be well managed by utilizing statistical methods of inquiry. In many facets of educational research this would be true, including my own research topic. The purpose of this study supports the use of a qualitative research approach to gain this understanding from the perspectives of the students. Therefore, for the purpose of this study, a qualitative research approach is appropriate since, as Merriam (2002) points out, qualitative research is "inductive; that is, researchers gather data to build concepts, hypotheses, or theories rather than deductively deriving postulates or hypotheses to be tested" (p. 5). The

data gained as a result of this study were used to build the key concepts and influencers involved in learning to apply knowledge gained from business coursework at the community college to professional employment settings.

Reichardt and Rallis (1994) validate the use of a qualitative research approach by stating:

A researcher can carefully and reliably measure the number of ski lifts within a city's limits or a child's performance on a standardized test, but neither may be of much help either in locating high-quality skiing or in discovering what is actually being learned in an educational program. (p. 7)

This study employed a qualitative research approach. This study sought to discover the meaning that is constructed on the part of the student with regard to how they learn to apply the knowledge gained through their business coursework at the community college to their professional employment. Therefore, seeking to gain an understanding of how this learning occurs on the part of the student is appropriately positioned for a qualitative approach to research.

The end result of this qualitative inquiry should provide the reader with a better understanding of how students learn to apply the knowledge they have gained throughout their business coursework at the community college. Furthermore, an understanding of the characteristics that influenced the ability to learn how to apply knowledge should be gained. The perspectives of the participants concerning their experience in learning how the application of knowledge occurs are paramount to this research study. It is through this construction of meaning on the part of the

participant with regard to learning how to apply knowledge that a better awareness of application-based learning will be discovered.

Epistemology

Epistemology is defined by Crotty (1998) as "the theory of knowledge embedded in the theoretical perspective and thereby in the methodology" (p. 3). The epistemological stance I chose for this study is constructionism. Crotty (1998) defines constructionism as a viewpoint that "all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (p. 42). The basic tenets of this epistemology address the purpose and questions inherent in this research study. Therefore, to effectively address the research questions and maintain focus on the purpose of the study, a constructionist epistemology was employed.

Knowledge is constructed according to this epistemology and is, therefore, appropriate for this study of application-based learning. Students have the opportunity to gain knowledge throughout their collegiate coursework. However, the manner in which students learn to apply this knowledge gained is the focus of this research study. To apply what they have learned, the individual will first need to construct meaning based on the knowledge they now possess. The meaning will also be constructed, in part, based on the situations in which the individuals are now active participants. Combining this knowledge with the situational aspects presented leads to the construction of meaning occurring on the part of the individual to

respond to these situations that they are now expected and equipped to handle (Crotty, 1998).

Another component of the constructionism epistemology pertains to the social world in which we exist. The social world and the things in that world lack significance until meaning can be constructed by individuals existing in that world. Crotty (1998) affirms this concept in stating "Before there were consciousnesses on earth capable of interpreting the world, the world held no meaning at all" (p.43). Such a scenario is precisely the type of situation that was the focus of this study on application-based learning. In applying the knowledge gained through their collegiate studies, the individual is essentially constructing meaning based on the knowledge they possess and the social world in which they are now operating. Prior to their entrance into this social world of professional employment, these situations carried no innate meaning to the student. However, once they possessed the necessary knowledge, they could not only recognize these situations but more importantly could construct meaning for these situations based on the knowledge they had gained through their collegiate coursework. Therefore, according to Crotty (1998), "What constructionism claims is that meanings are constructed by human beings as they engage with the world they are interpreting" (p. 43).

The two primary qualifications for participants in this study, being a community college business graduate and working in an area related to their studies, were appropriate for the use of a constructionist epistemology. The students themselves construct meaning based on what they have learned throughout their collegiate studies. In addition, they also take into account the aspects of the social



world in which they now exist. Therefore, the construction of meaning was a combined result of the individual knowledge possessed, the social world and objects of that world that the individual must now interpret.

Theoretical Perspective

Crotty (1998) defines theoretical perspective as "the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria" (p. 3). The theoretical perspective chosen for this study was interpretivism. According to Merriam (2002), "Learning how individuals experience and interact with their social world, the meaning it has for them, is considered an interpretive qualitative approach" (p. 4). For the purpose of this study, an understanding of the individual's perspective concerning their actual experience was being sought. Therefore, an interpretivist approach was appropriate. It is often the research itself that dictates a particular theoretical perspective as stated by Broido and Manning (2002), "More than one theory may inform a particular research question, but they should be combined judiciously; not all aspects of any theory are totally compatible with all aspects of any other theory" (p. 437).

The history of interpretivism is often traced back to Max Weber (1864-1920). As noted by Crotty (1998), Max Weber "...suggests that in the human sciences we are concerned with *Verstehen* (understanding)" (p. 67). Crotty (1998) expands this point by adding, "This has been taken to mean that Weber is contrasting the interpretative approach (*Verstehen*, understanding) needed in the human and social sciences with the explicative approach (*Erklären*, explaining), focused on causality, that is found in the natural sciences" (p. 67). Crotty (1998) shares the thoughts of

Wilhelm Dilthey (1833-1911) in contrasting *Erklären* and *Verstehen*, "He proposes that natural reality and social reality are in themselves different kinds of reality and their investigation therefore requires different methods" (p. 67).

Pursuing a research study from the interpretivist stance allows the researcher to gain the perspectives of the participants as they view the world in which they exist. This theoretical perspective differs in its approach from the positivist stance.

According to Crotty (1998):

A positivist approach would follow the methods of the natural sciences and, by way of allegedly value-free, detached observation, seek to identify universal features of humanhood, society and history that offer explanation and hence control and predictability. The interpretivist approach, to the contrary, looks for culturally derived and historically situated interpretations of the social life-world. (p. 67)

The focus on how students learn to apply the knowledge they have gained to their professional employment is aligned with the interpretivist research approach. This interpretation, from the standpoint of the participants, was sought to analyze and gain a deeper, more realistic understanding of this research topic. This is confirmed by Crotty (1998) who stated, "Our interest in the social world tends to focus on exactly those aspects that are unique, individual and qualitative…" (p. 68).

Methodology

According to Crotty (1998), methodology is "the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes" (p. 3). The methodology



chosen for this study was basic interpretive. According to Merriam (2002), "Constructionism thus underlies what I am calling a basic interpretive qualitative study. Here the researcher is interested in understanding the meaning a phenomenon has for those involved" (p. 37). In this study, the focus was directed at how students learn to apply the knowledge they have gained throughout their community college studies in business to their professional employment. Therefore, the study sought to produce an understanding of the meaning this application of knowledge has to the participants.

Merriam (2002) states the objectives of a basic interpretive study would display an interest in "(1) how people interpret their experiences, (2) how they construct their worlds, and (3) what meaning they attribute to their experiences" (p. 38). These three objectives were present within this study of application-based learning. In fact, they were of utmost importance in establishing a greater understanding of how students learn to apply knowledge in real-world situations. Garrick (1999) furthers the position of an interpretive study by saying, "An interpretive approach seeks a mediated description, for example, through 'story-telling' and the recording of a person's experience in symbolic (told or written) form" (p. 150).

Merriam (2002) addresses the use of a qualitative research approach by saying, "In summary, all qualitative research is interested in how meaning is constructed, how people make sense of their lives and their worlds. The primary goal of a basic qualitative study is to uncover and interpret these meanings" (p. 39). Therefore, once a certain level of understanding concerning application-based



learning was uncovered, interpretation of what this understanding means became necessary. The interpretation of this meaning may have different implications for the various audience members of this research study on how community college business students learn to apply knowledge.

Methods

As with many research methodologies, there are certain research methods that seem to be better matched to the basic interpretive approach than others. According to Denzin and Lincoln (2000), "...qualitative investigators think they can get closer to the actor's perspective through detailed interviewing and observation" (p.10). Some of the methods that are prominent within the basic interpretive methodology are interviews and document analysis. These do not characterize the only methods appropriate for this particular methodology, but represent a couple of the most popular methods utilized in basic interpretive research. According to Arminio and Hultgren (2002), "The choice of methods must relate to the chosen methodology. The one flows into the other coherently" (p. 453).

Personal Interviews

Rubin and Rubin (2005) provide rationale for the use of interviewing by claiming, "...if you anticipate that you may need to ask people to explain their answers or give examples or describe their experiences, then you rely on in-depth interviews" (pp. 2-3). Interviews allow the researcher to explore a particular topic in detail and gain a broader view of the topic from the standpoint of the participant. An interview provides the participants the opportunity to express the meaning and significance of their personal experiences. Merriam and Muhamad (2000) employed

interviews as their primary method in investigating how learning for older adults is impacted by the cultural context in which it takes place. As researchers engage in the interview, they should avoid imposing their own opinions concerning the topic onto their participants. Anderson and Jack (1991) provide helpful advice to avoid imposing opinions onto participants by saying, "The first step is to immerse ourselves in the interview, to try to understand the person's story from her vantage point" (p. 19).

For the purpose of this study, interviews served as the primary data collection method. To gain an understanding from the perspective of the participants, conducting interviews provided an appropriate method to acquire this viewpoint. According to Fontana and Frey (2000), "Increasingly, qualitative researchers are realizing that interviews are not neutral tools of data gathering but active interactions between two (or more) people leading to negotiated, contextually based results" (p. 646). My approach to these interviews was less of a question to answer format and more of a directed conversation with the students involved in this study. This approach helped make the experience much less formal and created an environment to encourage the participants to share their thoughts and feelings openly and honestly.

Personal interviews provided the chance to explain the purpose of the study to the participants. Interviews also allowed the opportunity to gather the student's perception concerning how they learned to apply the knowledge they have gained from their community college business courses to their professional employment. Additionally, the conversations with the participants in this study offered the

possibility to follow up with the students to gather clarification and further explanation of what had been shared concerning how they learned to apply knowledge.

A three-interview format was used with the students. The first interview lasted approximately 15 minutes and included an introduction of the study along with its purposes. The first interview also presented an opportunity to answer any questions the participants had concerning the research study. The second interview lasted approximately 45-60 minutes and focused on questions related to how students learned to apply the knowledge gained during their community college coursework in business. This interview was a guided conversation employing similar questions for discussion with each student. The final interview lasted approximately 30-45 minutes and provided the opportunity for follow up on any questions or issues that remained unclear or needed additional clarification from the second interview. The final interview provided the student with the opportunity to modify any of their original answers to present the most accurate representation of their perspective. The second and third interviews were audio taped, transcribed, and coded to identify common themes among the participants according to Lichtman's (2006) "...three Cs of analysis: from Coding to Categorizing to Concepts." (p. 167) as mentioned in the data analysis section.

Document Analysis

One more popular method used in basic interpretive research is document analysis. Tisdell (2000) conducted a study about spiritually-motivated women teachers, engaged in teaching for social change, that primarily made use of participant interviews. However, this study was enhanced by the use of document



analysis when Tisdell was able to view personal documents of the participants referring to their own spirituality. Document analysis provides the researcher the opportunity to see written text in the words and language of the participants. This method can also provide the researcher with a significant amount of history and background on a given topic.

Document analysis was an important component of this study. The first document to be analyzed was the job descriptions of the students. The job description provides expectations from the employer's perspective concerning the responsibilities that are a part of the position held by the research participants. The job descriptions provided the historical context of the employment position and what is expected of an individual employed in such a position. For those who are self-employed, a job description was created based on the work responsibilities shared by the students during the personal interviews.

Course competencies served as the documents used for analyzing every business class mentioned by the students involved in this research project. These competencies were created and maintained by the community college faculty members for each department along with input received from the department's advisory committee. Advisory committees are comprised of individuals employed in fields related to the academic department at the community college. The course competencies obtained from the community college were analyzed with respect to application-based learning. The individual competencies for each course were evaluated to determine the type of learning that was supposed to take place. Based on how the individual competencies were worded, a determination was made

regarding the focus of each. The competencies appeared to concentrate on either the memorization or application of course content. These course competencies were developed by the community college involved in this study. Course competencies were created as a way of documenting the material to be covered as part of the business course. They are also a helpful tool for the students to understand what to expect in taking the class and what students should learn as a result of completing the course. The course competencies that were analyzed as part of this study were obtained directly from the institution via their website, which is publicly available.

Data Analysis

After completing and transcribing the interviews as well as obtaining the job descriptions and course competencies, there was a significant amount of raw data available. To begin to understand the raw data and construct some meaning I employed Lichtman's (2006) "...three Cs of analysis: from Coding to Categorizing to Concepts." (p. 167). This approach incorporated a six step process "...to move from raw data to meaningful concepts." (p. 167):

- Initial coding. Going from the responses to some central idea of the responses.
- 2. Revisiting initial coding.
- 3. Developing an initial list of categories or central ideas.
- 4. Modifying your initial list based on additional reading.
- 5. Revisiting your categories and subcategories.
- 6. Moving from categories into concepts (themes). (p. 168)

The data produced as a result of this study were reviewed according to this six step process to identify themes that emerged from the data collected. Lichtman emphasized that "...making meaning from qualitative data is a process that moves between questions, data, and meaning...it is iterative, circular, and can be entered at any point." (p. 171). Therefore, as the data collected is reviewed and questioned, common themes began to emerge that provided insights into how students learn to apply knowledge gained from their community college business courses to their professional employment.

Once the interviews were transcribed, I began coding the data to detect common themes among the students. Bogdan and Biklen (2003) define the process of developing a coding system by saying "You search through your data for regularities and patterns as well as for topics your data cover, and then you write down words and phrases to represent these topics and patterns. These words and phrases are coding categories." (p. 161). These coding categories help to identify common themes that emerge from the data as shared by Bogdan and Biklen, "They are a means of sorting the descriptive data you have collected...so that the material bearing on a given topic can be physically separated from other data." (p. 161). These common themes were used to connect the various student perspectives toward some shared themes concerning application-based learning. Esterberg (2002) describes the task of data analysis by saying "...your job is to actively create meaning out of your raw materials" (p. 152). In this study some of the raw materials were the individual responses of my research study participants. Taken alone, they may only represent the view of a single individual. However, when combined with



the viewpoints of others, a certain level of commonality was produced to gain a more comprehensive understanding of how students learn to apply knowledge in professional employment settings.

During the data analysis phase it was necessary to maintain a clear focus on the responses of the participants and the meaning that is being constructed concerning application-based learning. Therefore, it was crucial to explore the data from the viewpoint of the students without injecting one's own thoughts and feelings upon what was shared. Luttrell (2000) addresses this concern in saying "The worry always exists that the voices and perspectives of those we study will be lost or subsumed to our own views and interests" (p. 499). I believe that by recognizing this concern I was able to keep my own feelings in check as I analyzed the perspectives of my participants.

The job description and course competency documents were analyzed to discover commonalities that existed. The job descriptions were reviewed to gain an understanding of the responsibilities for which the participants were accountable.

Job descriptions also provided a description of the expectations from the viewpoint of the employer. The course competencies were analyzed based on their wording to gain perspective on the material that was covered throughout the course. Course competencies also provided a description of the content to which the student would be exposed by completing the course.

Validation of Findings

Based on the responses of the participants, common themes began to emerge. It was these themes that ultimately led to the determination of findings



within this research study. The manner in which the findings were determined, as well as the findings themselves, needed to be authenticated for them to hold credence with the reading audience. In order for my findings to be understood and accepted by the reading audience, there arose the need to demonstrate a clear relationship of the underlying themes to the responses from the participants.

Esterberg (2002) offers advice to assist in the validation of findings by saying "Before you finish your analysis, you will need to examine your work carefully against the data you have gathered. You want to make sure that the analysis you've developed is actually supported by the data" (p. 173). The rationale underlying the findings needed to be rooted in the data gathered as part of the interview process. This was accomplished by sharing the findings with the participants to determine if their perspectives were represented correctly. This offered a chance to correct any misconceptions created from the interview responses. Furthermore, discussing the findings with the students assisted in confirming my findings by acquiring participant agreement.

Peer reviews were employed to help validate the findings. According to Creswell (2003) allowing another individual to review your findings will "...enhance the accuracy of the account." (p. 196). This added validation is a direct result of the reviewer who "...reviews and asks questions about the qualitative study so that the account will resonate with people other than the researcher" (p. 196). The use of peer reviews allowed the opportunity to insure that the manner in which the findings were presented is the way in which they are interpreted by someone outside of this research study.



Being a community college business instructor who utilizes an applicationbased learning approach might have impacted the validity of the findings. Griffith (1998) addresses this issue:

Does the biography of the researcher – their race, class, gender, sexual identity and history – privilege or disqualify their knowledge claims? Are knowledge claims based in biography simply another version of "identity politics" or do researchers with an intimate, often tacit knowledge of a group construct accounts that are more authentic or trustworthy? (pp. 361-362)

Being a community college instructor in the area of business, one has tacit knowledge concerning the coursework that is a part of various business programs. Furthermore, a certain level of familiarity is possessed with the type of students who are pursuing degrees in business at the community college level. Additionally, interaction with various employers who hire community college business students, allows one to learn how the business course material could be utilized in professional employment settings. I feel that my background and experiences did not influence how I viewed the findings of this study. Rather, this background assisted in relating to the viewpoints shared by the students as well as in the analysis of the documents used to understand how students learn to apply knowledge to their professional employment.

Narrative Structure

After the findings were discovered, they needed to be presented in a manner that will provide readers with an understanding of how the application of knowledge is learned. In doing so, Esterberg (2002) provides some helpful advice by suggesting



"...that students think about how they would describe their study to a 12-year old child, an older relative, or a being who has just arrived from outer space and knows nothing about their topic or the culture" (p. 171). In heeding Esterberg's advice, the dissemination of the research findings was presented in clear and easily digestible terms. The theories and subject specific verbiage used were clearly defined and explained for the audience to understand their use within this research study. Clearly presenting the results of this study should provide an opportunity for the reader to more fully understand application-based learning. In addition, a greater understanding of how students learn to apply the knowledge they have acquired to their professional employment should be gained.

A significant approach to share the findings was to rely on the individual perspectives of the participants. To do so, key quotations were selected from the students that addressed the particular finding being discussed. This allows the reader to hear the voice of the student directly. Furthermore, incorporating participant quotations provides credibility to one's findings and serves as a defense of the findings declared. Utilizing quotations taken directly from the students assists in identifying the various themes that emerged from discussions concerning the subject of application-based learning.

Role of the Researcher

As a community college faculty member within the discipline of business administration, I have a personal interest in the application-based learning approach as well as the findings of this research study. Furthermore, I utilize an application-based learning approach to instruction within my own business courses. There are a



variety of techniques that I employ in my own classroom to foster an environment of application-based learning for my students. I employ real-world examples in addition to my own personal experiences from working in the business community to assist my students in learning to apply the course material to actual professional employment situations.

Being an instructor who incorporates an application-based learning approach to teaching is something I needed to monitor during the course of this research study. Kleinman (1991) provides some advice on this issue in saying "...examine your emotional reactions to the setting, the study, and the participants. If you do not, your feelings will still shape the research process, but you will not know how" (pp. 184-185). Jones (2002) addresses this same issue in saying "...in qualitative research, it is imperative that researchers are cognizant of their own assumptions and interpretive lenses and then, through the writing process, are explicit about how these influence all aspects of the research design" (p. 472). Throughout this study I remained aware of my personal teaching style and thoughts with regard to application-based learning. I was also mindful of how these views could influence my research study and ultimately my findings.

Throughout interaction with the participants to this study I needed to be keenly aware of my role as the researcher. I engaged my participants to gain an understanding of their perspective on the issue of application-based learning. I needed to distance myself from the knowledge and viewpoints I already possess related to this topic. My intent was to discover the meaning associated with learning to apply knowledge from the viewpoint of my participants. According to Fontana and

Frey (2000), "...the researcher must be able to take the role of the respondents and attempt to see the situation from their viewpoint, rather than superimpose his or her world of academia and preconceptions upon them" (p. 655). Maintaining a clear and directed focus on the perspectives of the participants as opposed to one's own thoughts and feelings, provided the opportunity to gain a better understanding of how students learn to apply knowledge to their professional employment.

Goodness and Trustworthiness

According to Merriam (2002), "...there is no simple answer as to what makes a 'good' qualitative study...To be trustworthy, a study needs to be valid and reliable and conducted in an ethical manner" (p. 30). There are some strategies available to the researcher that can be used to enhance the trustworthiness of a research study. This research study employed a few of these strategies. One such strategy that was utilized in this study was the triangulation of data. Maxwell (2005) defines triangulation as "collecting information from a diverse range of individuals and settings using a variety of methods" (p. 112). To accomplish triangulation this study incorporated personal interviews as well as analyzing course competencies and participant job description documents. An additional strategy for goodness and trustworthiness employed in this study was in stating the positionality of the researcher. Jones, Torres, and Arminio (2006) define positionality as "...the relationship between the researcher and his or her participants and the researcher and his or her topic" (p. 31). The positionality of the researcher is presented in the role of the researcher section of chapter three.



Additional strategies for insuring goodness and trustworthiness deal with allowing individuals other than the researcher access to written study. Member checks are one such strategy that was utilized with this research study. According to Merriam (2002), member checks entail the researcher asking "...participants to comment on your interpretation of the data. That is, you take your tentative findings back to some of the participants...and ask whether your interpretation 'rings true'" (p. 26). All of the participants in this study were given the opportunity to review the findings of the study and offer their feedback. Another strategy employed for this research study was the use of peer reviews. Merriam (2002) states that peer reviews "...involve asking a colleague to scan some of the raw data and assess whether the findings are plausible based on the data" (p. 26). Merriam also shares that these peer reviews can be "...conducted by a colleague either familiar with the research or one new to the topic" (p. 26). Peer reviews for this study were conducted by sharing the results of this study with individuals within the field of higher education as well as some individuals outside of higher education to receive feedback concerning the findings and interpretations presented in the study.

Summary

An exploration into the basic interpretive research methodology has provided a greater sense of confidence in constructing my own research projects. By researching this methodology, a better understanding about this particular methodology from its origins to its application in research studies was gained. One can see the benefits inherent in a study seeking to gain understanding through the individual perspectives of the participants in their own words. This quest for

understanding is the reason a basic interpretive methodology was chosen for this research on how students learn to apply knowledge gained through community college coursework in business to their professional employment.

The need is realized to keep personal opinions and thoughts on application-based learning in check as one seeks to understand the perspectives of the participants. Being an instructor in the business department at the community college level, a connection exists to the students that are a part of this study. This association gives a certain level of familiarity with the participants being studied. Kanuha (2000) explains this in saying, "...although I experienced an ease and familiarity with study respondents, it was always offset by a kind of artificial officiousness that was attached to my researcher role" (p. 443). Therefore, it was imperative to manage the roles of both inside (instructor) and outside (researcher) in the community college setting to maintain an accurate portrayal of the meanings and experiences of the participants. Additionally, as an educator that utilizes an application-based teaching strategy in the classroom, one must be aware of how teaching preference may impact the interpretation and findings in this study.

Through a review of the literature on the background and use of a basic interpretive approach in research, an appreciation has been gained for the work that has already been completed. Having seen this methodology employed in various studies seeking to gain understanding of particular topics provides one with a better sense of the direction to take in future research projects. An enhanced look into the basic interpretive research methodology is provided in the review of literature in chapter two. The basic interpretive methodology in practice section in chapter two

examines a variety of research studies that employed a basic interpretive approach. What research represents to the researcher, the participants and the audience to whom it is directed certainly resulted from this study. Most importantly, a deeper understanding of what research means, which will be a significant asset for the research projects undertaken in the future.



CHAPTER 4. THE STUDY

Research Site

All of the participants in this study attended the same community college to complete their business coursework. The community college is located in a large metropolitan area in the Midwest and serves its students from multiple campuses. The institution has an enrollment of over 20,000 students in their credit course offerings. The institution also offers over 75 degree and diploma programs and more than 3,000 courses.

A wide variety of programs and certificates are offered through the business department at the institution. Opportunities are provided for students who are interested in pursuing a career in business or for those students who already work in a business setting and just want to enhance their skill set. Students are able to pursue an Associate in Science (AS) degree or an Associate in Applied Science (AAS) degree within various areas of business.

The business degrees and diplomas offered by this institution include:

Accounting and Bookkeeping diploma, Accounting Information Systems (AS),

Accounting Para Professional (AS), Accounting Specialist (AAS), Business

Administration (AS), Business Information Systems (AAS), Entrepreneurship

diploma, Hospitality Business diploma, Hotel and Restaurant Management (AAS),

Management (AAS), Management Information Systems (AS), Marketing (AAS),

Retailing diploma and a Sales and Management diploma. In addition to the degree

and diploma offerings of the institution, there are also some certificates within the



business discipline that include: Accounting I, Entrepreneurship, Graphic Sales and Customer Service, Management, Retailing, Sales and Supervision.

Faculty Profile

The community college included in this research study is comprised of 1,005 individual faculty members. This includes 333 full-time and 672 adjunct faculty members teaching across a variety of disciplines for the community college. These faculty members have an average age of 50.2 years and spans from 25 to 71 years of age. The educational level attained by these faculty members includes 274 instructors with at least a bachelor's degree, 201 instructors having at least a master's degree and 41 instructors with at least a doctorate degree. The average years of service for these faculty members is 9.1 years and ranges from less than a year to 37 years of service to the community college.

Evaluating the individual teaching styles of these faculty members was not within the scope of this research study. The faculty members have the academic freedom to choose the style of teaching they feel is most appropriate for their class. However, the faculty members at the community college are responsible for teaching in a manner directed towards the course competencies established for each of their classes. Therefore, even though this study did not address the various teaching styles employed by the faculty members at the community college, these instructors were still responsible for teaching their classes based on the course competencies.

Research Participants

There were a total of six participants involved in this study which included two males and four females. The participants were sought out by contacting business



faculty members at the institution to see if they might have students that would fit the following criteria:

- A community college Business student (Business Administration,
 Marketing, Management, Entrepreneurship, etc.)
- Graduating in the Fall 2006, Spring 2007 or Summer of 2007
- Earning an Associate in Arts degree, Associate in Science degree,
 Associate in Applied Science degree or a business related certificate
- Going to work or continuing to work in a business career related to their community college studies

During the three semesters used as criteria for this study there were approximately 100 business students that graduated from the community college. There were 13 individuals who responded with an interest in participating in the study. This initial pool of candidates was reduced to six for a variety of reasons. Three of the original people did not respond to repeated attempts to contact them about participating in the study. Another three of the candidates were not currently working in a business career nor had they been working recently in a profession relating to their community college studies in business. There was one person who was eliminated from participation in the study due to the fact that their current employment position did not relate to their studies in business at the community college.

For the purpose of this research study, pseudonames were used to protect the identities of the individuals as well as the companies at which they were employed. By using pseudonames, the participants were given the opportunity to

share their opinions without being identified by the audience of this study. Brief descriptions of the participants are as follows:

Pam

Pam is 23 years of age and is from a small town outside of the metropolitan area where the community college is located. Pam graduated from the community college in the spring of 2007 with an Associate in Applied Science degree in Business Management. She also completed the coursework necessary to be eligible for a certificate in Sales Management. Her cumulative grade point average while at the community college was 2.32. Pam attended the community college primarily as a part-time student, taking the majority of her classes during the evening.

Shortly before graduation Pam completed an internship where she functioned in the roles of Customer Service Associate, Layaway Associate and Customer Service Manager for a national discount retailer. Some of the duties she performed in these roles were organizing and directing meetings, handling customer complaints and questions, as well as training and monitoring employees working at the cash registers. After graduation from the community college, she gained employment in a departmental position at a large department store.

Yasmin

Yasmin is 45 years of age and resides in a small town outside of the metropolitan area of the community college. Yasmin graduated from the community college in the spring of 2007 earning an Associate in Applied Science degree in Management. She had originally attended the institution 15 years prior within the Office Technology program and then returned to the college to pursue her degree in

management. Her recent experience at the community college was as a full-time student. She completed her management degree while maintaining a cumulative grade point average of 3.8.

Yasmin founded a camper rental company where she is currently the Chief Executive Officer. She handles all aspects of the business as she is the primary employee, although she does employ the use of family members to assist in operating the business. Some of the duties included in this role are preparing the campers for rental, taking reservations via the phone, servicing the campers while in use by the customer and handling all financial transactions for the business.

Larry

Larry is 33 years of age and moved to the metropolitan area of the community college from a large city on the east coast of the United States. Larry graduated from the community college in the spring of 2007. He earned an Associate in Applied Science degree in Business Information Systems. He also completed the necessary coursework to earn a certificate in Micro Computers. He attended the community college as a full-time student and carried a 3.38 grade point average over the course of his experience at the community college.

Larry is currently an independent Web Designer for his own company. In this role he consults with customers and designs, builds and maintains websites for their organization. Shortly after graduation he worked as a Database Manager for a local charitable organization. In this position he was responsible for managing and updating various databases for the organization. His responsibilities in this role

included running reports, building databases based on the specifications of his employer as well as interpreting the results of the reports he had created.

Rachel

Rachel is 21 years of age and is from the metropolitan area in which the community college is located. During her time at the community college, she attended as a full-time student. She maintained a cumulative grade point average of 3.7 while pursuing her degree. Rachel graduated from the community college in the spring of 2007 with an Associate in Arts degree.

Rachel is currently employed as a Dispute Resolution Analyst for a national financial institution. In this role she is responsible for handling both inbound and outbound calls concerning credit card transactions. She also handles consumer and business credit card disputes for her customers via the phone. Additionally, she performs peer training for the new employees that are brought into her department. She also manages escalated calls from customers that require a bit more time and attention to resolve the issue.

Andrew

Andrew is 30 years of age and moved to the metropolitan area of the community college from Africa. Andrew graduated from the community college in the spring of 2007 with an Associate in Applied Science degree in Management. While at the community college, he pursued his degree as a part-time student. His cumulative grade point average was 3.67.

Andrew is currently employed as a Patient Escort for a major medical facility located within a metropolitan city. In this role he is responsible for customer service



as well as communicating effectively with patients and staff. Andrew is also responsible for responding to the various emergency codes of the medical facility when announced. He also assists in the training of new employees at the facility.

Beth

Beth is 58 years of age and had previously been living in a major city on the east coast of the United States prior to moving to the metropolitan area in which the community college is located. Beth completed her supervisory certificate from the community college in the spring of 2007. While at the community college, she attended as a part-time student. Her cumulative grade point average during her time at the community college was 4.0.

Beth is currently employed as an Assistant Manager of a bookstore at a metropolitan educational institution. In this role she is responsible for overseeing all of the activities within the bookstore. This includes the staffing and training of employees, scheduling work shifts and responsibilities as well as interacting with the stakeholders to the bookstore such as instructors, provosts and students.

Findings

After the individual interviews had been transcribed and the job description and course competency documents were obtained, the raw data contained in these sources were reviewed. The initial reviews of the data provided an opportunity to code and categorize the data to identify commonalities that existed across the various sources. The data were read and reviewed on multiple occasions to further refine the codes and categories assigned and to begin identifying common themes that emerged from the data. Revisiting both the recorded interview and transcribed

interview data on separate occasions provided the opportunity to gain a deeper understanding of the perspectives represented by the data and the possible meaning that could be constructed.

Throughout the course of interviews with the research participants, document analysis of the course competencies and job descriptions there emerged some key findings concerning the application of the knowledge gained through business coursework at the community college. Reviewing the interview transcripts led to the identification of characteristics that provided a positive influence in learning to apply the business course material. The review of interview transcripts and recordings also helped identify some characteristics that appeared to have negatively impacted the participant's ability in learning to apply the material from the business courses to their professional employment.

Recurring themes began to emerge from the interviews with the research participants as well as during the analysis of the interview transcripts. These themes were categorized as ownership of learning, instructor impact on learning, course characteristics influence on learning and knowledge application in action. Additional insights into the subject of learning to apply knowledge were gained from the document analysis of the course competencies from the community college and the participant job descriptions of their professional employment.

Theme One: Ownership of Learning

As the students shared their views on learning to apply the knowledge gained from their business coursework to their professional employment, it was evident there were certain aspects of their collegiate experience that influenced their ability



to apply what they had learned. The students shared perspectives relating to their personal involvement in learning how to apply knowledge. As they shared their viewpoint on these influencers, there were certain recurring sub-themes that evolved. These sub-themes were identified as student characteristics and learning activities. Each of these areas of influence provided the students with different experiences and opportunities to learn the material presented to them to apply it in their professional employment upon graduation from the community college. Evaluating the influencers of student characteristics and learning activities provides a more detailed view of how learning to apply knowledge occurs.

Student Characteristics

A positive influencer in learning to apply the material covered in the business coursework to professional employment settings were the characteristics of the students themselves. These student characteristics were displayed not only in the personalities of the individual but also in what they shared concerning how they approached their own learning. Yasmin addressed this point in saying "...I'll sit there and I'll read the material but it's a lot better for me to discuss it and to participate in it and think outside the...box..." Additionally, Yasmin added to the discussion of student characteristics in saying "...interpret what the instructor is saying to make sure that I have it clear in my mind....Process it, you retain it, you think about it more and I think you get a lot more out of it." This was validated by Beth: "...some of it is what you put into it yourself, it's not just the teacher in the class." This approach to learning allowed these students to take more ownership over their learning and

ultimately hold themselves accountable for the retention and eventual application of the knowledge they had gained.

Another attribute of the student that emerged from the personal interviews related to the outlook they held regarding their educational experience. This outlook helped put their learning into perspective and gave them a foundation from which to build their learning experiences. Larry described his outlook in saying:

I was positive about it from day one but when you come into a community college you don't have anything to lose, all you have is something to gain. When I was able to take away something that maybe I could apply in the professional community I felt that I can benefit and that I have something to offer.

Yasmin, a returning adult student, framed her outlook on her educational experience by stating "...no matter how old I was, I was still smart enough to learn." Setting this kind of outlook on their educational pursuits, as shared by Yasmin, provided these students the opportunity to be successful, as they believed they controlled much of their own academic success.

An alternative way in which the personal characteristics of the students influenced their learning and ability to apply the knowledge gained was in the perception of how the knowledge they currently possessed would be applied within their professional employment. Beth addressed this personal characteristic of the student in saying:

Any class you can learn the facts and you can put those into sets however you're gonna use them. But your own personality goes into results, your own



past experiences, the situations you're in and that type of thing. So it's not just what you learn in class, it's what you learn in life and put them together and you get what you are as a manager, a supervisor, or a person.

In Beth's example, the additional knowledge that is gained from the business courses is forged with the life knowledge you already possess, and it is through this combination that you are able to effectively apply the new knowledge you have gained. Beth elaborated on this point when asked if a lack of student effort would result in a student being less prepared by saying, "Not necessarily less prepared but kind of straight-shirted rather than versatile....It's more than just book learning, its life learning."

Learning Activities

A positive influencer in learning to apply the material covered in the business coursework to professional employment settings were the learning activities that occurred during the course. Throughout the interviews with the students, there was mention of various activities during the courses that assisted them in being able to comprehend and eventually apply what they had learned. Beth mentioned an activity that was utilized in one of her classes as it related to her exams by saying, "The group tests in the Management course was something I hadn't experienced before and it developed team work actually and that was a good thing." This activity was part of the assessment component of the course. However, from Beth's perspective it not only allowed her to complete the assessments in the course but also provided her with a valuable opportunity of working with a team to accomplish a goal. This

type of skill is one that she continued to use and is an integral part of her professional employment.

Self-assessments were another set of learning activities that were mentioned in learning to apply the knowledge gained. These self-assessments were not always the same for each subject matter but did have some residual affects for the student. Andrew shared his perspective on the impact of the self-assessments by stating:

...we did a lot of surveys. In emphasis to understand your leadership style, your communication style. If you have a dominant personality or otherwise. So, those surveys that we took and, kind of helped me to know where I'm at as of then and what I need to do in order to be not only competitive but also to lead other people and to understand them, they gave me the confidence cause if you really don't know where you are, you cannot progress to be better. Having to understand where I stood then gave me the confidence to work hard to be where I want to be and that's where the confidence came from is through those surveys and understanding me.

Yasmin commented on the use of self-assessment activities in one of her classes:

We did something like colors; it's like a color grid. Everybody had to fill this information sheet out and then we all figured up what color we were....We had to be placed in different groups with those people and you had to try to settle an argument with those kind of people....And you kind of learn...after you get used to it and you actually use it you can detect that very easily. And then they teach you in class: Ok, if this person has this kind of personality you're not gonna be able to yell and scream at them because they will just

shut down or they'll get mad and punch you in the face, you know this is how you have to handle it. So that's what I've done...you mimic the person and you also kind of figure out what kind of personality they have and it makes it a lot easier to deal with them.

For Yasmin, this particular activity was more than just an assessment of herself. The activity provided her with a way of assessing her own personality, which allowed her the opportunity to be better prepared to interact with other people. She also was able to gain an understanding of how the personalities of other people will affect the way they respond to her.

An additional learning activity that was mentioned during the personal interviews was the use of simulations in the course. The simulations were often based on the course material but also added another element. The students were allowed to put the material into practice in a learning environment that would be safe for the student to experience their newly acquired knowledge and skills. Pam mentioned a simulation activity that assisted her in saying, "...for one of my final projects in our Selling class we had to go to a customer and sell a presentation..."

This particular simulation activity provided Pam with the opportunity to practice in the classroom what she had learned about selling allowing her to gain experience and additional knowledge. Yasmin also mentioned simulation activities in which she was engaged and how they allowed her the opportunity to grow in her abilities and gain some new skills:

I used to be shy and kind of introverted and when they did the public speaking, we had to give a lot of speeches, it forces you out of your shell and



makes you more confident in the end because you realize that people actually do listen to you, that they are responsive to you and that it can be a fun experience to get to know other people. And you would've missed out on all that opportunity before so it just got me out of my shyness, got me out of my shell and I'm a more confident businesswoman because of it.

Although this activity was a part of the course requirements, for Yasmin it was excellent preparation for her new business venture. Even though she was uncomfortable, it forced her to make some changes in her own skill set. She gained additional skills in public speaking which was going to be very important in her professional employment.

Class participation was mentioned as an activity that assisted in the comprehension and eventual application of the knowledge gained. Beth spoke about this while referring to an employee that was underperforming and the alternatives that were available to her. She said that this particular situation was covered in the course material but additionally "...it was just a discussion that you can't just fire them so we discussed them [alternatives] and came up with different ways that it could be accomplished." Yasmin also commented about the impact of class participation on her ability to comprehend and retain the material by saying, "...there was a lot of class participation which helped me a lot." She expanded on this point in sharing:

...to get input from other students, to be able to talk and to converse...I think that you retain a lot more information if you actually have to think about it



whether talking about it you're interacting with people than to sit there and take a note and it just kind of goes through you.

The class participation that took place within the business courses at the community college provided an opportunity for the students to discuss the material with the instructor and fellow students to gain a deeper understanding of what it means. If they are going to eventually apply the knowledge they have gained from their business courses, they will need to first have a solid understanding of the material, and the class participation gave them that opportunity. Throughout the conversations with the students there emerged some positive influencers in learning to apply knowledge gained from the business coursework at the community college. The student characteristics and learning activities seemed to provide a positive influence on the ability to learn how to apply the course content.

Theme Two: Instructor Impact on Learning

During the personal interviews with the students in this study there were some perspectives shared concerning the instructors who taught the business courses at the community college. From these discussions with the students it appeared the instructors of these classes had an influence on the student's ability to learn how to apply knowledge. The students shared both positive and negative examples concerning the impact these instructors had on their ability in learning how to apply knowledge. The perspectives shared by these students concerning these instructors are represented in the sub-themes of negative impact of instructors and positive impact of instructors on learning to apply knowledge. Therefore, from the student's perspective, there were certain positive and negative characteristics of the

instructor that influenced their ability to learn how to apply the knowledge they gained from the business coursework at the community college.

Positive Impact of Instructors

An additional influencer in learning to apply the material covered in the business coursework to professional employment settings referenced certain characteristics of the instructor for the course. There were definitely some characteristics that provided the students with a positive influence in their ability to learn how to apply the knowledge they had gained from the course. For some, the instructor's ability to provide clarity on the course material was enough to register a positive impact. Pam mentioned one such instructor characteristic that was helpful by saying, "A lot of them [instructors] use slide shows." She then went on to discuss how this provided a benefit to the student since the instructor would "...copy them [slide shows] off every time for each chapter then you can make notes on them. That kind of helped everybody." The ability to see the content being discussed, in addition to hearing the instructor talk about it, added an additional component to the participant's ability to comprehend the data and allow them to retain the material that was presented. Rachel spoke of this benefit as well in saying:

Most of our teachers would either write, writing things out, like actually being able to visualize it and see it, either on the chalkboard or on the screen.

Those presentations were effective, seeing it instead of just reading it, you know, out of the textbook, some teachers make you do that, just read verbatim, verbatim, and that's what's going to be on the test. But when a



teacher presents it to you somewhere where you can see it, I think that makes it stick a lot more and that was a good key, learning tool for me.

The instructor employing a variety of resources such as writing on the board or providing access to their slide presentations seemed to be an effective way for the students to comprehend and retain the information.

Another key attribute of the instructors in these business courses were their ability to provide real-world examples to help illustrate the course content. The use of these types of examples displays an application-based learning approach to learning. Merely focusing on the textbook was not enough for these students to be able to learn how to apply the knowledge they had gained once they had entered their professional employment. Larry shared his perspective of instructors who employed the use of their own personal experiences in saying:

Some of those things that I was taught were not necessarily directly out of the textbook. Maybe the instructor implemented their own personal experience:

This is my experience on how I applied this. And maybe implementing the instructor's personal experience I was able to have a better understanding.

Rachel shared her opinion about instructors incorporating some examples from outside of the textbook by saying:

...they'll [the instructors] just kind of go off and teach about things but not teach directly out of the book. Their own personal knowledge is what they're giving you and that's...what you're going off of is their knowledge on the subject and it's not so much focused on the book.



A similar sentiment regarding the instructor's use of examples was mentioned by Andrew in stating:

...some of them have even real-life, I mean, real-world experience, in the business setting. Its not that they just, came to teach, they had experience, and they had a lot to say, to kind of give us a distinction between what a classroom is like and how it's like when you go out there.

The benefit to the students in the instructors' use of real-world examples provided more than just the understanding and comprehension of the course content. Using an application-based learning approach offered the opportunity to see how this application of knowledge occurs. Furthermore, the instructor was providing their perspective of having put to use what they have learned and is now able to pass it on to others. Andrew expanded on this point by sharing:

...most or perhaps all of my instructors have had real world experience...not only did they understand the academic part of teaching business but they understood the application part of it which because they had worked with those companies before they held jobs as professors or teachers at the community college. So that gave them more, I would say, confidence that made them stronger and they focus not only on the books but what this book can apply to the real world.

The instructor being able to discuss examples of applying the course content to real-world situations provided a foundation from which the students could begin to make their own applications.



One more instructor characteristic that was important was the instructor's concern regarding the student's ability to comprehend the course material. Yasmin discussed the concern on the part of the instructor this way:

If I needed extra help with something they were more than willing to sit down and help me with it. Or if I didn't quite understand or wanted to discuss something more that I had learned in class to make sure that I got it right they were always there to help me and talk to me about that. Sometimes they would push me to do things that I didn't actually feel comfortable doing like the public speaking and competing in competitions. They would kind of nurture me along the way and kind of give me a gentle push and they were required things so I knew I had to do them in the end but they made it fun, they made it interesting and most of all I was learning.

The level of concern on the part of the instructor from this example was crucial to Yasmin's ability to understand the material. The instructor was exhibiting a personal interest in the student's comprehension of the course material. Larry shared a similar perspective concerning the personal approach utilized by his instructors:

...the way the instructor explained something and kind of did that personal interaction, maybe little things like that it kind of helped give me a better understanding about the course and maybe by having that better understanding, I didn't have that before I started the course so I felt: Ok, I can take that away.

During the personal interviews and later analysis of the transcripts it became evident that the instructor of the course could positively impact the student's ability to learn



how to apply knowledge gained from the business coursework at the community college.

Negative Impact of Instructors

The impact on the part of the instructor for the business courses at the community college also had the potential to negatively influence the student's ability to apply knowledge. Throughout the personal interviews a concern surfaced over the negative influence that can be the result of certain instructor characteristics. Just as the participants had indicated there were characteristics that had a positive influence on their ability to apply what they had learned, there were also certain characteristics that seemed to hinder their ability to comprehend and later apply what they had learned. One characteristic mentioned by a couple of the students had to do with the English fluency of the instructors. Yasmin shared her perspective on this issue in saying:

...make sure that there was teachers that spoke fluent English so that way I could understand what they were saying...they could relay what their thinking was on the subject. Sometimes that got very difficult and I had to rely more on the book than actual class participation.

Rachel echoed similar thoughts with regard to this language barrier between the student and instructor by saying:

...one of our professors, there was definitely a language barrier between us.

And, so, he was one of the teachers that would get up and write things on the board and talk the whole period but you couldn't understand him so it was a waste of time.



Based on the responses of the students, the language barrier seemed to interfere with their ability to comprehend the material being presented. Without being able to fully comprehend the material that was presented to them in their business classes at the community college, the participants found they were struggling in their attempts to apply the knowledge gained from these courses. This may be a result of bias on the part of the student toward these instructors, but was still viewed as having a negative influence on their ability to learn how to apply knowledge.

A different characteristic that evolved from the personal interviews concerning negative influencers to applying knowledge was a conflict between the instructor and the student. The conflicts originated from various causes and were viewed as having a negative influence on the student involved in the conflict. Larry described a situation in which he had a conflict with an instructor who was teaching the class at a level geared towards working professional students as opposed to students who lacked any previous experience with the course content. He described his interaction with the instructor as follows:

When I went to ask questions and so forth he wasn't willing to answer my question he would just say: You got the textbook, look it up. I just felt like: Why were they paying you? Look, you're here to help prepare me and it was just like if I got a question, that's why I'm asking. It's like, do I have a textbook, do I have all these things? Absolutely, but there's gonna be times when I'm gonna get stumped and I just felt like in some situations like that...I kind of wish that the situation could have been a little bit better.

As Larry shared, this conflict impeded his ability to learn how to apply the material that was being covered in the course.

Another instructor characteristic that had a negative influence on the ability to learn how to apply knowledge centered on the issue of how the instructor presented the course material to the class. Rachel explained this negative influence in stating, "...they [instructors] need to make more real-world references..." She also compared how the course material was presented to her and how she thought it should have been presented by saying, "...I think that there should have been less textbook and more real-world application and the case studies that we did. I think that would have been more beneficial than what I had." Therefore, the presentation of the course content was much more than just covering key concepts and theories. There was a feeling that explanations of how to use the course material would better prepare the students to apply what they had learned in their eventual professional employment.

While there were instructors who had a negative influence on the students' ability to apply the knowledge gained, students commented that differences among instructors is all part of the educational experience. Beth shared her perspective on instructor characteristics in saying "As students are all different, employees are all different, teachers are all different and maybe that different teacher would have been able to direct me more in this situation but not that situation." Therefore, instructor characteristics did seem to influence the ability to learn how to apply knowledge gained, but there was also the realization that one instructor may not necessarily provide a more positive influence on knowledge application than another instructor. From the standpoint of the students, there were influencers within their business

coursework at the community college that impeded their ability to learn how to apply knowledge to their professional employment. The negative influencers focused on course omissions, course scope and course assessments as well as the characteristics of the instructors in the business courses at the community college.

Theme Three: Course Characteristics Influence on Learning

The students also shared certain characteristics of the business courses at the community college that appeared to influence their ability in learning how to apply knowledge. These characteristics displayed both positive and negative influences on their ability to learn how to apply knowledge. The sub-themes that emerged within the discussion of course characteristics included course content, course omissions, course scope and course assessments.

Course Content

A positive influencer in learning to apply the material covered in the business coursework to professional employment settings related to the course content. The course content is referring to the actual content that was covered in the various business classes. The content was often focused on the text and other supporting materials that would help to explain the theories and application of the key components of the course. Pam shared about how a process for dealing with difficult customers was documented in one of her business courses and how that could be directly applied to a common situation she experienced in her role as a Customer Service Manager by saying:

...I took it to my manager and he printed it out for the customer service associates and they made a little badge thing, on the back of your badge to, if

the customer comes up you can flip it over and do the steps. And there was a thing on the back of the board that we had in our book on how to do each step and it came from one of my books in school.

Having something to reference from a textbook provided her with the ability to apply what she had learned in a business course. This reference was reinforced by having it documented and easily accessible in her professional employment setting. Yasmin also shared her perspective on how the material from one of her business courses assisted her by stating:

When you are dealing with the customer you have to click with them if you can and it makes it more of a personal experience for them not just a business transaction. If you're able to mimic, that's one thing that I did learn in class, is being able to mimic somebody else and their personality it helps them become more at ease, relaxes them and the sale goes better. They also retain more information than if you were very standoffish and snotty and they don't have a good experience.

From these perspectives it becomes clear that there is value in the material presented in the business classes that can actually be implemented in real-world settings. Beth affirmed this view of how the material covered in the course allowed her the opportunity to apply her knowledge in saying:

...in one class we studied Mexico and kind of their, well their wage being what it is compared to what it is here...and how much different things cost and that type of thing. We were able to talk to the non-traditional or the diverse students that worked for me and learned that type of thing to be able to

compare the cost of living here and the cost of living there and the way they did things compared to the way we did things. It kind of brought it to the forefront that we're not all the same and I guess that's what diversity is all about, that they need to learn and we need to learn in order to mesh and it's been a very interesting ride.

In Beth's example, the material from this course concerning international aspects of business assisted her in applying what she learned from the course material to her actual work setting. Beth expanded on this point by sharing her perspective from another class:

...in Human Relations you learned what you can and cannot do from a business point of view and a relationship point of view. Your diversity is dealt with there and your harassment issues were dealt with there, it's always good to update on that and that was an opportunity to do that.

Andrew also experienced situations where he was able to refer back to the course material to apply what he had learned. Andrew shared:

The confidence to deal with people came from one of the classes that I took which is Leadership Development. We all know that people are perhaps the most difficult species to deal with, very complex. In order to be in the business world you really have to have leadership skills to deal with people, all kind of people, because in the workforce, especially where I work, is very diverse. We have people from perhaps all over the world working with us, they're African, Asian and having to come here, I also, in dealing with some Americans, for me to understand them and them understanding me, had to

take an initiative to really not only lead my behaviors but also understand theirs too and lead in one way. That's how I think that my business classes gave me the confidence and how to deal with people and how to treat people and get your point across and be understood as well as understand.

The course material also provided a basic understanding of concepts and techniques that will be applied in the business world. Larry spoke to this point by sharing:

In some of my classes we kind of touched based a little bit on flow charting and looking at organizational charts and being able to look at it on paper in black and white, I was able to better prepare myself when working on further projects. Kind of like, think before you speak, it's like, I was able to see a clear picture instead of just jumping into it with not, really being prepared.

In Larry's example, he was able to gain a knowledge base from which to work. This base of knowledge helped prepare him for the task that he was expected to perform. Rachel commented on the base knowledge that was gained through her business classes and how it assisted her in her professional employment setting. Rachel stated:

...in our business classes we were taught what a mission statement was, so when I got to Big Bank I knew what a mission statement was and then investigated on my own to what our mission statement is and what that means for our business.

For Rachel, the knowledge she gained while at the community college gave her the basis from which to interpret the mission statement of her employer. The base



knowledge she gained allowed her to have a general understanding of this aspect of business. She expanded on this understanding by realizing how that mission statement impacted her company, her department and ultimately her position within the company. Without the base knowledge provided via her business coursework at the community college, it may have been very difficult for her to make this type of correlation in her professional employment.

Course Omissions

A negative influencer in learning to apply the material covered in the business coursework to professional employment settings mentioned by the students was the course material that the students believed was omitted. During the personal interviews there were multiple occasions in which the participants would share something they thought should have been a part of their business coursework but was omitted. The omissions proved to have a negative influence on their ability to make applications based on the course material. An example of this was shared by Pam who had worked as a Customer Service Manager and she stated "I didn't even have training in the customer service....Having a formal training might have helped..." The skills for customer service were obviously an important component of Pam's professional employment position, and yet these skills were not a part of her business coursework at the community college.

The real-world application of course material continued to be a concern on the part of the students. Yasmin explained it further as she was underprepared for:

The accounting part of it....the way that they [the instructors] did the accounting I suppose would be the correct way, as like a CPA or something



would do, but in the real world you don't have time to do 15 different entries and do this and that and then have it come out to zero again...I don't have time for it. I had to hire somebody that does my tax stuff for me because it's just too confusing. So I just total up my, you know, how much I earned and then submit it to her, fax to her the information and then she goes ahead and does it online, faxes me back what I owe in taxes and then I send it in.

Yasmin admits the material was presented in the correct manner. However, this particular way of applying the material did not match the way she needed to know how to complete this task for her own business. The application of the course material was different in real-world applications than what she had experienced within the business coursework. This difference related to the course material presented and how it would be used represented an omission. Larry shared a similar perspective in comparing the course material with the expectations of his professional employment position. Larry stated:

I was given enough information...a sample of what it could be like and I was kind of hoping for, not necessarily what it could be like, but what the picture is actually like. I was a little caught off guard....I kind of was hoping for the projects to be actual: this is how it is and not sugarcoat it. When I was able step into the actual field I felt...the way I was shown was very much sugarcoated, it was nothing like what it was compared to the classroom setting.

After Larry had been in his new position for a period of time he was able to look back at his collegiate experience and see how it related to his current work environment.

He summarized his feeling by saying:

I felt in a way I went into it blind....I kind of wish I had a more real life impression on can I do this or not? I thought when I graduated, I thought OK, obviously the school thinks I can do it, but I think some of the projects I was tested on and graded on were not exactly what an employer may be asking for. I wish some of the projects were more actual than just: Let's see if you can do this.

Andrew also shared this concern about the way material was presented in the classroom and how you would use it in a professional employment setting. He summarized this point by sharing that some classes he took:

...were theory and some were application. The courses that primarily focused on theory and things like that are really hard to kind of get a grasp of, you know. And that's what I would say, like not being able to role play....They just give you an idea and then you can later add on to it as you go on or take something away if it didn't work well. So, lack of role playing and application of theory and how those would apply to the business world for instance, that's what I would say were the negative parts.

The professionalism that was expected of them in the business world was another component that the students thought was omitted from their business coursework at the community college. They thought as though they were not ready



to act in a professional manner that met employer expectations. Larry summarized his feelings by saying:

...as far as conducting yourself in a business, in a professional manner, you don't really touch base on a whole lot of that stuff. Going from student to, now I'm a professional, I wasn't really prepared for that...

The expectation of professionalism that the students encountered upon entering their professional employment left them feeling somewhat underprepared. This was an aspect of their business coursework in which they thought was not covered adequately if at all.

Course Scope

The scope of material covered during the course was also mentioned as a negative influencer in learning to apply the material covered in the business coursework to professional employment settings. During the personal interviews with the students there were discussions on the scope of the material that was covered. The breadth of the course content was an issue emphasized by Larry in saying:

...in a classroom setting you deal with small levels of information and trying to manage that. They would give you a project and you would try to manage information within a small level, and trying to prepare you to handle a much greater level within an organization, I think, would better help prepare me for the real job field.

Larry then gave an example of this issue with course scope by saying:

In my recent job I was doing database management and development. We, in some of my classes, here at the community college we were shown how to



develop and manage databases but we did it with...3 tables here with maybe 50 clients in those tables. And when I get into the real world it's like 100 tables and 5,000 clients and you're trying to run reports with those and then when you're trying to run a report maybe you get an error and you have to go back and look for the error. I just kind of wish that, little things like that, I could've had more training on what to expect when I got there.

This lack of content coverage had an adverse impact on Larry's ability to perform the job responsibilities expected of him as he entered his professional employment. Many of the courses that were taken by these students were at an introductory level. It appeared they needed to have more content coverage in their business classes at the community college to be better prepared for their eventual employment. Beth stated her perspective on the scope of course content by saying "...some of the depth could be a little bit better. They can teach you, or they do teach you how to handle situations but not if the circumstances are different." This concern was also shared by Rachel who stated:

When I came to the community college, it was more like, not like High School all over again, but it was just school and it was very general....I wish we could have started focusing on the business aspect of it a little bit more heavily while I was here instead of it being school work, kind of tie it all together to actually mean business....what I'm trying to say is that I wish we could have, I could have realized that I needed to focus and realize that this is a whole aspect of business while I'm here...

Based on their comments it appears the breadth of the material covered in the business courses at the community college did negatively impact these participants in their ability to learn how to apply the knowledge they had gained.

Course Assessments

An additional negative influencer in learning to apply the material covered in the business coursework to professional employment settings was associated with the assessments of student learning. As part of the business courses, there were various methods employed in an attempt to assess what the student was learning. The assessments provided an opportunity to concentrate on the course competencies as well as measure the student's ability to achieve them. Some of the methods in the business courses focused on definitions of terminology and rote memorization. Rachel described this method of assessment by saying "...definitions, memorization stuff that you're going to forget next week and something that I'm not going to hold onto to." This method was also incorporated in the testing utilized in some of the business classes. In speaking on those aspects that had a negative impact on being able to learn how to apply what they had learned, Rachel mentioned, "Memorization tests, because you just memorize it and then you forget about it and you don't have to think about it again so it's gone." In addition Rachel said her tests "...were terms and they were multiple choice and so I think get away from that and go more towards essay, tell me about something, describe to me this, it will stick better in people's minds."

These methods of assessment were also used in some of the business course assignments. Much like the tests in the course, the assignments could have



a negative impact on the student's ability in learning to apply the course content. Rachel explained her viewpoint on the use of assignments by saying, "I think if we did less worksheets, less memorization, more reading I think that would've helped being prepared for my job a little bit better." The assessment component of the business courses was necessary to evaluate the level of knowledge gained on the part of the student. However, based on the perspectives of the students, not all assessments were effective in helping them to learn how to apply the knowledge they have gained.

Theme Four: Application-based Learning in Action

Throughout the course of this research, the students shared professional employment situations where they were able to apply the knowledge they gained from their business courses. These examples provide a clearer picture of the application of knowledge that is occurring and how the participants were able to relate that application back to the course material. Their perspectives on the manner in which they applied their knowledge are paramount to understanding how students are able to learn how to apply what they have learned.

Yasmin provided an example of how she was able to apply something she had learned in sharing:

In the sales class they went through commercials and they went through different logos and what catches your eye and what doesn't. The color schemes of everything. Blue is trusting, red is like exciting...But one thing that I did get out of it was humor was one of the best sellers. Also...a high percentage of your sales are generated by children. And so when I did my

logo I incorporated the blue flame because I want them to know that I'm trustworthy and I also incorporated the whimsical animals to catch the children's eyes. So, I tried to incorporate as much as I could from what I learned in my selling class of what would work and what would catch somebody's eye. You don't need a neon light blinking because that doesn't always work either. Catchy works, funny works. So that's what I tried to do...

In this example there was a direct correlation to the material between the business class and Yasmin's professional employment. The key concepts were recalled and put into use in a way that was fitting and beneficial to Yasmin and her business. She was able to identify the situation and refer back to what she had learned to solve this particular situation. An additional example was provided by Andrew:

We all know human relations are basically how to relate to people and how to...get things done. As a manager you're not gonna be going around doing everything on your own you have people that will get things done for you. In order for your subordinate to get the job done right you really have to have that ability, how to relate to other human and how to make them effectively get the job done as you would do it yourself. From one of my classes...Human Resource Management we learned all these human relations and how to work well with people and get a lot of things done through people because by the end of the day you're only one person you can't be at too many places at the same time. So, relating to people and understanding their psyche and treat them right with respect. Each individual as we all know is motivated by different things, maybe for you it could be

recognition and for me it could be a gift card to Sears or Target. So by understanding that, you can kind of get everybody satisfied and they'll do anything for you.

In this example Andrew had to rely on the knowledge he gained concerning working with other people and apply that knowledge to effectively address his responsibilities. Without this knowledge, Andrew might not have been as effective in addressing this particular situation.

A final example was provided by Beth in discussing how to handle discipline issues in her role as Assistant Manager. She explained her perception of the application of knowledge in sharing:

...if there is a discipline problem, something that you need to talk to your employees about that you need to take a step by step approach in order to make it stick if you are going to have to relieve the person of their duties. You know, whether it's verbal and itemized or written and signed or, you need to go through step by step.

In this example Beth was able to refer back to a process that was learned in her business classes for dealing with discipline issues in the workplace. By possessing this knowledge, she had a clear process in her mind for handling these types of situations. If Beth did not have this knowledge, then this issue may have been more difficult to handle and potentially lead to less effective results. From the discussions with the students there emerged examples in which they were able to apply something they had learned through their business coursework at the community



college. The examples from the standpoint of the student provide a more thorough understanding of application-based learning.

Document Analysis

This research study incorporated the analysis of some key documents that are a part of the business coursework at the community college as well as the professional employment of the research participants. Two documents were studied as part of this analysis: course competencies and participant job descriptions.

Course competencies were obtained from the website of the community college, which is accessible to the general public. The course competencies from the community college were analyzed in an attempt to understand the content that was presented in the various business courses offered. The course competencies provided an indication of what the student should learn by the completion of the course. Additionally, the job descriptions of the students were analyzed to gain a better understanding of the responsibilities of the students within the framework of their professional employment.

Course Competencies

Part of this research study included the analysis of course competencies for the business courses at the community college. These competencies are created as a way of documenting the course content that will be covered. Competencies also relate to and influence the assessments of learning used throughout the course as they attempt to measure the student's level of understanding. They are also important to students as it provides them with a list of competencies that they should possess upon completion of the course. Therefore, the course competencies provide

a guide for the student as well as the instructor and create a common framework from which to present the course material. Course competencies were obtained and evaluated for all of the business courses that were mentioned as having been completed by the students in this research study.

In analyzing the individual wording of the course competencies it was evident that there was emphasis placed on both memorization of the course content and the ability to apply the knowledge gained from the course. There were key terms in the competencies that helped to identify which area of emphasis were being targeted: memorization or application. Both areas of emphasis were noted for the majority of course competencies evaluated as part of this study. From this analysis it was apparent that both memorization and application were important competencies for the business classes completed by the students.

Course competencies such as the following appeared to have a focus on the memorization of course content:

- Identify the three levels of management
- Define a promotion mix
- List the factors influencing price decisions
- Describe criteria used to distinguish small business from big business
- Outline the major components of the classical management perspective
 and the human resource management perspective
- Name the six steps used in managerial decision making

For those course competencies that appeared to require more memorization than application, there were key terms found such as: define, name, list, state, outline,



cite, describe, identify and indicate. The competencies that were written using these key terms most often referred to business concepts included in the course content that could be recalled from memory without having to show how the concept could be applied to real-world settings.

The course competencies that seemed to have a focal point on memorization were not necessarily less important than those requiring the application of course material. However, these course competencies did appear to be focused on the student's ability to memorize key facts and concepts related to the course material as opposed to learning how to apply the knowledge they were gaining. Being able to recall key facts and terminology may still assist the student's ability to apply what they are learning. However, focusing on memorization of key items of the business course content does not necessarily correspond to an application-based learning approach.

In addition, there were business course competencies listed that seemed to be centered more on the application of the course content than memorization as seen in the following:

- Demonstrate personal management techniques including problem solving,
 creative thinking, and teamwork negotiation
- Explain how we should cope with individual differences
- Examine how your personal leadership style affects different groups in different ways
- Evaluate the techniques that leaders use to reduce the harmful aspects of conflict



- Analyze the ability of a business to withstand poor business conditions
- Apply time management skills

Course competencies that appeared to be concentrated more on the application of the course material than on memorization used terms such as: analyze, demonstrate, relate, interpret, evaluate, discuss, examine, simulate, explain, and apply. These business course competencies appeared to be seeking a deeper level of understanding of the course material by requiring more of an application of the material covered in the course.

Analyzing the course competencies provided an indication of the level of importance these competencies had on the content being presented in the course. Based on the written competencies, it appeared there were more competencies focused on the memorization of course content as opposed to application. However, there were still a significant number of written course competencies that appeared to concentrate on the application of the course content. There were numerous course competencies focused on the ability to apply the knowledge gained from the course. This could be viewed as a positive indicator of the desire to equip business students at the community college with the resources necessary to learn how to apply knowledge in their professional employment.

Participant Job Descriptions

For the purpose of this study, the students were asked to obtain a formal, written copy of their job description from their employer. These participant job descriptions were gathered and reviewed with respect to the employer expectations for the specific jobs they held at their respective organizations. For those participants



who are self-employed, a job description was created by virtue of their job responsibilities shared in the interviews. These job descriptions were created since the self-employed participants did not possess formal, written job descriptions.

The participant job descriptions provided the proper framework for considering the application of knowledge gained from the business coursework in professional employment settings. The job description is the documentation received from their employer relating to the job responsibilities for which the individual was held accountable. Some of the responsibilities included in the job descriptions are as follows:

- Strong oral and written communication skills to interact with customers and co-workers
- Proven success in problem analysis and resolution
- Able to work effectively within a team environment
- Demonstrated ability and desire to provide excellent customer service
- Demonstrated ability to manage, coordinate, and supervise a diverse range of activities and people
- o Demonstrated ability to function autonomously with minimal supervision
- Demonstrates initiative to improve quality and customer service
- Must be able to follow complex orders, and exercise initiative and good judgment in executing assignments

The job responsibilities included as part of the participant job descriptions were analyzed in relation to an application-based learning approach to teaching and learning. Similar to the process of analyzing course competencies, the individual

tasks included in the job descriptions were evaluated. This evaluation involved examining the wording used on each of the individual tasks to determine exactly what was expected of the employee. As the job descriptions were analyzed, there appeared to be some similarities across the various responsibilities expected by the individual employers. Many of the job responsibilities that were listed coincided with the viewpoints shared by the students in reference to how they learned to apply knowledge from their business courses at the community college.

There were many job responsibilities that referenced some manner of effective communication. This communication was in the form of internal communication with fellow employees as well as external communication involving the customers of the organization. Being able to effectively communicate was mentioned by the students as they discussed course activities such as class participation and presentations made to the class. Being involved in these course activities appeared to assist the students in learning how to effectively communicating with others.

An additional job responsibility found frequently among the participant job descriptions was team work and the ability to effectively work in a team environment. Team work was mentioned by the students as they referred to some of the group activities they experienced as part of their business coursework at the community college. For instance, there was mention of the use of groups to complete a common task such as course exams. Additionally, there appeared to be some value gained from the opinions shared by other classmates when discussing the course material, which simulates an environment of team work. Therefore, the class activities that

emphasized team work provided these students an opportunity to learn how to work in teams, which is now expected of them in their professional employment.

One more commonality that existed in the job descriptions was associated with problem solving and working independently. This responsibility seems to correspond to the use of real-world examples shared in the classroom to assist the student in learning how to apply the material covered in the business courses at the community college. The use of real-world examples provide the students an opportunity to apply the knowledge they were gaining as part of their business coursework. Furthermore, these real-world examples could provide a foundation from which the student could reference to accomplish their job responsibilities. Utilizing real-world examples in the classroom could also assist them in learning how to complete various job responsibilities their employers expect. This allows the students an opportunity to practice completing these tasks within the classroom environment. This practice could prepare them to work independently in their professional employment since they have already been exposed to similar situations within their business coursework at the community college.

In analyzing the job descriptions of the participants, verification could be made concerning the job responsibilities that were discussed during the personal interviews. Additionally, the job descriptions provided an indication, from the employer's perspective, of how the knowledge from the business courses at the community college could be applied to individual tasks and responsibilities for which the participants were accountable. It seemed that for many tasks, the knowledge

gained from their business coursework would need to be employed to fulfill the role in which they were hired to perform.

The document analysis of both the course competencies and the participant job descriptions provided additional understanding concerning application-based learning. The course competencies provided the expectation of learning for the business course for which the student was enrolled. The job description provided the new employee with employer expectations in their professional employment.

Analyzing both documents lead to the discovery of how learning to apply the knowledge gained from the business coursework at the community college could be applied in professional employment settings.

Researcher Reflexivity

Conducting this study provided a significant amount of rich data concerning how students learn to apply knowledge gained from their business courses to their professional employment. Admittedly, I believe in teaching from the approach of application-based learning. I feel it is vitally important that, as instructors, we provide our students with a variety of opportunities to learn how to apply the material we are presenting in our business courses at the community college. I was comforted and encouraged by the fact that my participants were able to recall material from their business courses that they were in fact using in their professional employment.

Obviously, these were the type of findings that I had hoped to discover while conducting this research study. Additional studies need to be conducted however to verify my results.



Because my background is in business, not only as a student but currently as a community college faculty member who teaches business administration courses, I possess a significant interest in the findings of this study. I appreciated the responses of the students in sharing how they learned to apply the business course material to their professional employment. The student's viewpoints concerning their own collegiate and employment experiences proved invaluable in understanding how students learn to apply knowledge which was the focus of this research study.

The process of interviewing recent graduates provided a fresh perspective of the current use, or lack thereof, of application-based learning in the classroom. I couldn't merely rely on my own experiences or the experiences that are documented in the literature. Rather, the personal interviews provided an opportunity to obtain the current perspectives of learning how to apply knowledge gained from business courses taken at the community college.

In my role as a faculty member in the business administration department, I was definitely impacted by conducting this study. I enjoyed hearing from students about those positive influencers impacting their ability to learn how to apply business course material to their professional employment. It was a fantastic feeling to know that the community college educational system, of which I am a part, provided some positive influencers in the process of learning to apply business course material. There was also considerable value in discovering those negative influencers on the ability in learning how to apply the knowledge gained from business courses at the community college. These negative influencers provide an opportunity for me, as an educator, to create learning environments that will be more effective for my students

and assist them in the process of learning to apply the knowledge they are gaining through their business courses at the community college.

As a result of conducting this research study, I have gained a deeper insight into the manner in which students learn to apply course material. This insight is valuable to me as an educator who wants to provide effective learning environments for students. Listening to the student's share the positive and negative influencers on their ability to learn how to apply knowledge has encouraged me to evaluate the techniques I use in the classroom. I believe I will be able to address my own teaching style to respond to the positive and negative influencers discussed in this study to become a more effective instructor.

Summary

The findings from this research study provide a deeper understanding of the process by which students learn to apply knowledge. Throughout the literature there have been numerous studies focused on how we learn. The variety of methods in which we learn can be just as different from one another as are individual learners. The findings of this study provide a contribution to the existing literature on teaching and learning by offering viewpoints from students on the influencers that impacted their ability to learn how to apply knowledge gained from their business coursework at the community college to their professional employment. This student perspective enhances the prevailing literature by allowing the student to voice their viewpoint on the application-based learning approach to teaching and learning.

CHAPTER 5. SUMMARY AND OBSERVATIONS

Learning to Apply Knowledge

Throughout the course of this study a deeper understanding materialized from the personal interviews with the students as well as in the analysis of the course competency and job description documents. There appeared to be some positive influencers that assisted the student's ability to learn how to apply the knowledge they were gaining. These positive influencers centered on the course content, learning activities, instructor impact and student characteristics. In addition, there emerged some influencers that seemed to impede the student's ability to learn how to apply the knowledge gained via business courses at the community college to their professional employment. The negative influencers were focused on course omissions, course scope, course assessments and instructor impact.

Positive Influencers

Based on the perspectives shared by the students involved in this study it appeared there were some attributes related to the material in the course that provided a positive influence on their ability to learn how to apply the material. Students mentioned specific material they could refer back to as a way to insure they were handling a given situation in their professional employment appropriately. Processes discussed in the course material were also mentioned that aided the student in learning how to apply the material in real-world settings. The students also shared some skills that were gained as a result of being exposed to the course material. The material identified areas in which the student was not familiar and

provided them with a context from which to learn how to apply these newly developed skills to their professional employment.

The students also shared their perspectives on activities within their business courses that provided a positive influence in learning how to apply the knowledge they were gaining. There were activities that focused on building team work within the class to accomplish a shared task. Another activity was the self-assessments conducted by the students to gain a better understanding of themselves as individuals and how knowing this about themselves will assist them in their professional employment. Additionally, the students mentioned simulation activities in the course that allowed the student to experiment with the course material via a simulated environment. Allowing the student the opportunity to practice these newly found skills and knowledge in the classroom provided a safe environment for the student to learn how to apply the knowledge they were obtaining from the course. Class participation was also stated as having a positive influence on the student's ability to learn how to apply their knowledge. The discussions within the classroom afforded the students the opportunity to hear the opinions of other students as well as the instructor concerning the material being discussed.

An additional positive influencer referenced the characteristics of the instructor for the business courses at the community college. One of the attributes of the instructor that was shared by the students was the use of a variety of methods to display the content of the course such as writing on the board or using presentation software. An additional attribute of the instructors that seemed to produce a positive influence was the use of real-world examples to help explain the course material.

The use of these real-world examples seemed to provide the students an opportunity to begin making their own applications with the course material. The level of concern for the student, on the part of the instructor, also emerged as a positive influence on learning. When the instructor took time to insure the student comprehended the material, the student appeared to gain a better understanding.

A final positive influencer on learning to apply knowledge was related to the characteristics of the students themselves. The students seemed to have some control over their learning via the approach they took to their classes and the effort they put forth to insure they understood the course content. Furthermore, the students shared the positive impact resulting from them possessing an optimistic view concerning their overall educational experience. The unique personalities and experiences of the student also provided a positive influence to learning how to apply the content of the course. The material being presented was referenced back to the students own experiences which provided them with some context in which to apply the new knowledge they were acquiring.

Negative Influencers

Throughout the duration of this research study, the students shared some influencers that seemed to hinder their ability in learning how to apply the course content from their business classes at the community college. Perspectives were shared with respect to omissions that occurred in terms of entire courses as well as omissions in individual course content. The students shared that there were instances in which they were unable to apply the knowledge they had gained because the material was not covered or was covered only in theory or only at an

introductory level. These omissions left the students with a void in being able to apply what they learned to their professional employment.

An additional negative influencer that was shared by the students was related to the scope of the course material that was covered. The level of content covered in some of the business courses was presented at an introductory level, which did not appear to prepare the students adequately for the types of situations they would encounter in their professional employment. The introductory level of content covered provided the students with a base of information on the subject but not to the level that was expected of them in their professional employment.

The assessments used as part of the business courses seemed to have an influence on the student's ability in learning how to apply the content of the course. Specifically, the use of assessments that primarily focused on the memorization of terms and definitions seemed to be viewed as a negative influencer in learning to apply the content being presented in the course. A perspective was shared by one of the students explaining how the manner in which they were assessed in the course did not assist her in being able to fully comprehend the material and apply it in her professional employment.

There were certain characteristics of the instructor mentioned by the students as having the potential to negatively influence the student's ability in learning to apply the course material to their professional employment. One instructor characteristic that had a negative influence on learning was a language barrier between the student and the instructor. It appeared that those instructors who were not completely fluent in the English language faced a challenge in being able to

communicate effectively with the students concerning the content of the course. This hindrance in communication negatively influenced the student's ability to understand the course content and ultimately their ability in learning to apply the material being presented. Although this may have been a result of some bias on the part of the student, it was still perceived as a barrier to learning how to apply the knowledge they were acquiring in the business courses at the community college to their professional employment.

Another negative influencer associated with the characteristics of the instructor related to conflicts that can arise between the instructor and the student. For example, the expectations of the student regarding the role of the instructor do not always coincide with the instructors expectations of their own role which can lead to conflict. The result of this conflict was a feeling that the student was not receiving the preparation they needed to be able to learn how to apply the course content to their eventual professional employment.

The manner in which the instructor presents the course content can lead to a negative influence on a student's ability to learn how to apply the course material to their professional employment. Relying on the textbook as the primary source of information for the course content does not necessarily provide the best opportunity for the student to learn how they are to use the information in the course. The students mentioned the need for real-world applications that would allow them to visualize the course content as it would be employed in actual situations. By providing such examples in the classroom to help illustrate the course material, the

opportunity was presented for the students to begin making their own applications based on the content of the course.

Research Question Responses

At the beginning of this research study the following questions were guiding the research being conducted:

- 1. How did community college graduates in business learn to apply the knowledge gained in their business classes to their professional employment?
- 2. How are community college graduates in business able to relate the business course material to their professional employment?
- 3. What influenced the ability of community college graduates in business to apply the business course material to their professional employment?

Through conducting and evaluating personal interviews as well as job description and course competency document analysis, a greater understanding of application-based learning emerged. This research study provided insights on how students learn to apply the knowledge they have gained in their business courses at the community college to their professional employment.

The first research question leading this study addressed how students learned to apply knowledge from their business coursework to their professional employment. The response to this question resulted from the individual interviews when the students shared their viewpoint on how they had learned to apply knowledge. The students mentioned that displaying the course material in the context of real-world examples assisted them in learning how they could apply the

material to their own unique situations. They also mentioned the opportunity to practice using the course material was helpful in learning how to apply the material to their professional employment. Practicing the material while still in the classroom allowed them the opportunity to begin constructing applications of their own.

The second research question directing this study addressed how the students were able to relate business course material to their professional employment. The responses to this question emerged as a result of conversations with the students in discussing how they had applied knowledge from their business courses to their professional employment. The students shared personal examples from their professional employment in which they had applied knowledge gained from their business courses at the community college. These examples included references made back to course material or processes they had learned that could be applied in their professional employment. These personal examples provided viewpoints from the student's perspective concerning their own application of knowledge.

The final research question used to direct this study concerned what had influenced the student's ability to learn how to apply the knowledge they were gaining during their business coursework at the community college. The response to this research question was discovered through the personal interviews. The students identified certain aspects of their community college experience that provided a positive or negative influence in learning to apply knowledge. The positive influencers were displayed through the course material, activities in the course as well as characteristics of the instructor and student. There were also some

influencers that hindered the student's ability to learn how to apply knowledge. The students shared their views on various aspects of their community college experience that impeded their ability to learn how to apply the course material.

These negative influencers included material that was omitted from their course, the scope of material covered, course assessments and characteristics of the instructor.

Implications for Practice

This research study provides an opportunity to gain a better understanding of how students learn to apply knowledge gained from their business coursework at the community college to their professional employment. As shared by the students in this study, an application-based learning approach could assist them in learning to apply the knowledge they were gaining. Some of the responses from the students concerning the application-based learning approach include "...there should have been less textbook and more real-world application...I think that would have been more beneficial than what I had", "...make more real-world references" and "...some of them [instructors] have...real-world experience in the business setting...to give us a distinction between what a classroom is like and how it's like when you go out there."

The community college included in this study may be interested in considering the implementation of an application-based learning approach to teaching and learning. Implications for employing such an approach at the community college would include three distinct recommendations for the community college:

1. Faculty training



- 2. Revising course competencies
- 3. Creating student awareness

Because the faculty at the community college would be responsible for delivering course content using an application-based learning approach, adequate training would need to be provided. The training should be included as part of the orientation of new faculty to the community college. By providing the training at such an early stage, the faculty can begin to realize how they could use an applicationbased learning approach in their classroom. The training program for the new faculty should incorporate the use of an application-based approach so that the new faculty will be given the opportunity to see this approach in action. There should also be additional training provided after the new faculty have been with the community college for one full year. This will allow the new faculty an opportunity to experiment with an application-based learning approach. Then as they come together for additional training they will be able to share their experiences in employing such an approach. By sharing their experiences, the faculty will be able to learn from each other concerning the best practices for incorporating an application-based learning approach.

Implementing an application-based learning approach at the community college will require a revision of the course competencies. As revealed in this research study, some competencies for the business courses focused on the application of knowledge. However, a significant amount of course competencies focused on the memorization of key facts and concepts. Implementing an application-based learning approach to teaching and learning will necessitate a

revision of the existing course competencies so that there is a focus on the application of knowledge. The revision could be conducted by the existing faculty members to identify the core learning objectives for each course. Once these objectives have been identified, course competencies can be developed focusing on applying the knowledge gained from the course to accomplish each competency. Through the revision of the course competencies, the student would gain an understanding of what is expected of them as they pursue their coursework.

Additionally, the revised competencies would provide the instructor with direction in how to present the course to assist in the application of knowledge.

Students of the community college will need to be educated on the application-based learning approach to teaching and learning. The community college could inform students through the current registration and orientation processes at the institution. This way the students will be aware of the application-based learning approach prior to entering the classroom at the community college. Students need to be made aware of this change so they will know what to expect of the course and what is expected of them in the course. Informing the students of this approach will allow them the opportunity to discuss their own experiences related to applying the course material to real-world situations. Bringing their own applications of the course material to the class could assist other students in learning how they could apply the course material to their own situations.

Stakeholder Analysis

An application-based learning approach to teaching and learning could impact a variety of stakeholders to the community college. These stakeholders would



experience varying levels of impact from the implementation of an application-based learning approach to teaching and learning. Specifically, there are three primary stakeholders to the community college that would be most impacted by incorporating an application-based learning approach:

- 1. Students
- 2. Faculty
- 3. Employers

The incorporation of an application-based learning approach could help prepare students for the situations they will encounter in their professional employment. Providing students with opportunities to see applications of the course material within the classroom could have a positive impact on their ability to learn how to apply their knowledge once they enter their professional employment. Using the applications of course material within the classroom provides the students a safe atmosphere in which to experiment with this application of knowledge. This safe environment should allow the student to learn as they interact with the course material so that they will be better equipped to handle similar situations in their professional employment.

The community college faculty would also be impacted by the use of an application-based learning approach to teaching and learning. As shared by the students in this study, faculty members play an important role in the student's ability to learn how to apply the knowledge they are gaining in their business courses. The use of real-world examples, how the material was presented to the students and the

instructor's concern for the student are a few ways in which the instructor could assist the student's ability to learn how they can apply the course material.

The final stakeholder that would be interested in the adoption of an application-based learning approach would be the employers who hire our community college graduates. Employers have a vested interest in the ability of our students to apply the knowledge they have gained throughout their business coursework to the careers they are about to enter. When these employers hire our graduates they are doing so under the assumption that these new employees are now prepared for the professional employment settings they are entering. Incorporating an application-based learning approach to teaching and learning would allow the community college to address the needs of the employers who hire their graduates.

Further Research

This research study provided a look into the phenomenon of how community college graduates in business learn to apply the knowledge they have gained to their professional employment. The participants involved in this study were all graduates of the community college who focused their studies in a business related discipline. These students then went on to pursue professional employment in an area related to their business studies. Admittedly, this is a unique and specific part of the entire college graduate population. To gain a deeper understanding of how students learn to apply knowledge, additional research will need to be conducted.

Graduates of four-year colleges and universities would be a logical population to research due to their extended exposure to collegiate courses. It would be



interesting to discover if these additional years of education would impact their ability in learning to apply the knowledge they have gained. Additionally, research should be conducted outside the area of business education to learn how graduates of other disciplines are learning to apply the knowledge they have gained. It would also be beneficial to research various methods that could be employed to assess the learning that is taking place in those students who are exposed to an application-based learning approach. Additional research into this assessment component could yield valuable results concerning the effectiveness of utilizing an application-based learning approach to teaching and learning.

Another area of research that could warrant further exploration regarding how students learn to apply knowledge gained to their professional employment would be from the perspective of the employer. The employer would have direct knowledge of the employee's performance in the profession after graduating from the college or university. Thus, the employer has a vested interest in the ability of the student to learn how to apply knowledge to their professional employment. Conducting research from the perspective of the employers who have hired these college graduates could yield an even deeper understanding of the application of knowledge.

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APPENDIX A. INSTITUTIONAL RESEARCH PROPOSAL

April 10, 2007

Provost

Re: Research Proposal

I am interested in conducting a research study for my Dissertation at Iowa State University. The premise of my research deals with application based learning. Basically I am interested in speaking with former business students from the community college who are now working in an area related to their business studies. In order to ascertain these potential participants I would like to contact the business instructors at the college for potential students who are graduating after the Spring or Summer semester and are going to work in an area related to their business studies. I would like to be able to contact these instructors prior to the May graduation in order to obtain the contact information of those individuals who may have an interest in participating in my study. Please let me know if I would be allowed to make such contact with these instructors.

I have discussed this research study with the Institutional Review Board (IRB) at lowa State University and have been given the OK to collect the contact information of these potential candidates for this study. I will not be conducting the participant interviews until the Fall. I will be submitting a formal proposal to the IRB in the summer.

If you have any questions concerning this study please feel free to contact me.

Thank you,

Joe Hanson Business Department Chair



APPENDIX B. INSTITUTIONAL RESEARCH APPROVAL

From: Provost

Sent: Thu 4/12/2007 8:38 AM

To: Hanson, Joe R...

Subject: FW: Research Proposal

Hi Joe.

You are good to go! It might be a good idea to save this email in case any guestions arise in the future.

Bon voyage into your research,

Provost

From: Executive Director of Institutional Effectiveness

Sent: Thursday, April 12, 2007 8:37 AM

To: Provost

Subject: RE: Research Proposal

If you are sponsoring the research I have no problem. Usually, I make sure they have gone through the IRB process at their university, but you can also sponsor it.

Executive Director of Institutional Effectiveness

From: Provost

Sent: Thursday, April 12, 2007 8:01 AM

To: Executive Director of Institutional Effectiveness

Subject: FW: Research Proposal

Hi,

Our group leader in business, Joe Hanson, is nearing the dissertation phase of his doctoral program at ISU. He will conduct his research this fall, but wants to begin working on contacting students who are graduating this May so that he can access them for his sample this fall (when he will receive permission from IRB). I do not have any problem with him moving ahead with what he proposes in the attachment below. Do you have any concerns or advise of any specific protocols?

Thanks. **Provost**



APPENDIX C. PARTICIPANT SOLICITATION REQUEST

I am nearing the Dissertation phase of my PhD program at Iowa State University and would like your assistance in locating potential candidates for a research project I will begin in the Fall. The ideal candidate for this study will be:

- 1. A Community College Business student (Business Administration, Marketing, Management, Entrepreneurship, etc.)
- 2. Graduating in the Fall 2006, Spring 2007 or Summer of 2007
- 3. Going to work or continuing to work in a business career related to their Community College studies

My study will focus on application-based learning. Essentially I am interested in how these students are able to apply what they have learned through their Community College education to their business work settings. My research proposal request has been approved and is being sponsored by my Provost. The collection of this information has also been authorized by the Institutional Review Board (IRB) at Iowa State University.

If you have students that fit the profile I mentioned please ask them if they would be willing to participate in this study. If they are willing to participate I would need only their contact information (Name, Address, Phone & Email) at this point in order to contact them in the Fall. Therefore, I am not asking for you to provide me with this information without the consent of the student. Rather, it is the student themselves providing their contact information as being interested in participating in the study.

I appreciate any help you can give me on this project. If you have any questions please feel free to contact me.

Thank you, Joe Hanson Business Department Chair



APPENDIX D. INFORMED CONSENT

INFORMED CONSENT DOCUMENT

Title of Study: Application-based learning: How community college business

students learn to apply knowledge to their professional employment

Investigators: Joe Hanson

This is a research study. Please take your time in deciding if you would like to participate. Please feel free to ask questions at any time.

INTRODUCTION

The purpose of this study is to assess how the material taught in business classes at the community college is applied in work settings. You are being invited to participate in this study because you are a community college graduate within the discipline of business.

DESCRIPTION OF PROCEDURES

If you agree to participate in this study, your participation will last for the duration of 3 interviews. The first will introduce the project, the second will focus on questions related to the topic under study and the final interview will be used to follow up and clarify points from the second interview. The first interview should last approximately 15 minutes. The second and third interviews should last approximately 45-60 minutes. During the study you may expect the following study procedures to be followed. You will be asked a series of questions in interviews relating to how you apply what you have been taught in your business classes to you actual job setting. The interviews will be audio taped and will be destroyed by 7/31/08. In addition to the interviews, you will be observed in your work setting for one session lasting approximately one hour. You will also be asked to provide a copy of your job description.

RISKS

While participating in this study you may experience the following risks:

May feel slightly uncomfortable being part of an interview

BENEFITS

If you decide to participate in this study there will be no direct benefit to you. It is hoped that the information gained in this study will benefit society by providing valuable information on how classroom material is actually applied at work.

COSTS AND COMPENSATION

You will not have any costs from participating in this study. You will not be compensated for participating in this study.

PARTICIPANT RIGHTS

Your participation in this study is completely voluntary and you may refuse to participate or leave the study at any time. If you decide to not participate in the study or leave the study early, it will not result in any penalty or loss of benefits to which you are otherwise entitled.

CONFIDENTIALITY

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, federal government



regulatory agencies and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy your records for quality assurance and data analysis. These records may contain private information.

To ensure confidentiality to the extent permitted by law, the following measures will be taken:

- Pseudonames will be used in place of actual participant names
- Only the investigator will have access to the study
- Information will be kept in a locking file cabinet and password protected computer files
- Data will be retained until 7/31/08 after which it will be destroyed
- o If the results are published, your identity will remain confidential.

QUESTIONS OR PROBLEMS

You are encouraged to ask questions at any time during this study.

- For further information about the <u>study</u> contact Joe Hanson or you can contact the supervising faculty member Larry Ebbers at <u>lebbers@iastate.edu</u> or by phone at 515-294-8067.
- If you have any questions about the rights of research subjects or research-related injury, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Diane Ament, Director, Office of Research Assurances (515) 294-3115, dament@iastate.edu.

***********	******							
PARTICIPANT SIGNATURE Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and the your questions have been satisfactorily answered. You will receive a copy of the written informed consent prior to your participation in the study.								
Participant's Name (printed)								
(Participant's Signature)	(Date)							
and all of their questions have been answer	d the procedures that will be followed in this							
(Signature of Person Obtaining Informed Consent)	(Date)							



APPENDIX E. INTERVIEW GUIDE

Interview questions for this study will be similar to the following:

Course Content

- Discuss the things you have learned in your business classes.
- O How do you feel about the material that was presented in your business classes?

Preparation for Work

- How do you feel your business classes have prepared you for your job responsibilities?
- Describe some job responsibilities in which you felt you were under-prepared to perform.
- How is your performance at work different from coworkers who have not taken any business classes?
- What course material could have been covered to make you better prepared for your work responsibilities?

Application Opportunities

- Describe some of your work responsibilities.
- How do your job responsibilities relate to what you have learned in your business classes?
- Describe some specific situations in which you have applied something you learned in your business classes to your job.
- How did your coursework assist you in handling these specific situations?
 If you could change anything about how you were taught, what would you change?



APPENDIX F. PARTICIPANT AND FACULTY SUMMARY

Student							
Name	Age	Graduation Term	Degree Earned	Grade Point Average			
Pam	23	Spring 2007	Associate in Applied Science: Business Management	2.32			
Yasmin	45	Spring 2007	Associate in Applied Science: Management	3.8			
Larry	33	Spring 2007	Associate in Applied Science: Business Information Systems	3.38			
Rachel	21	Spring 2007	Associate in Arts	3.7			
Andrew	30	Spring 2007	Associate in Applied Science: Management	3.67			
Beth	58	Spring 2007	Supervisory Certificate	4.0			

Faculty							
Full-time	Adjunct	Average Age	Average Years of Service	Bachelors Degree	Masters Degree	Doctorate Degree	
333	672	50.2	9.1	274	201	41	