

CHAPTER IV

FINDINGS

This chapter contains the summary of findings from interviews with 16 collegiate level Business Management and Accounting faculty. These faculty members were from two community colleges and two four-year universities in the state of North Carolina. Those interviewed were asked to describe the defining characteristics of college-level course work.

Description of the Sample

Sixteen full-time university and community college professors participated in this research. Eight were from four-year universities and eight were from two-year community colleges. There were two different four-year institutions involved, and two different two-year institutions. Two business management faculty members and two accounting faculty members were interviewed from each institution. The faculty participating were from two of the largest state universities and two of the largest community colleges in the state of North Carolina.

One of the community colleges attracts most of its students from an urban area. The other community college attracts most of its students from a rural area. Enrollment at one four-year university was predominantly black while enrollment at the other university is predominantly white. All four schools had a strong representation of students with a cross cultural perspective. This researcher found

that the faculty members exposure to students of varied backgrounds greatly enhanced the richness of data in this study. This researcher also found during the interviews that a number of the faculty had taught at both two-year and four-year institutions. The strength these interviewees gave to the study was that they were able to speak about their personal approach to teaching college level courses at both institutions. They could also speak to their observation of delivery methods and expectations of their peers at both institutions. Each interview was summarized. The characteristics of college-level course work faculty members discussed are summarized using the words of the interviewees.

From the four-year institutions, 8 faculty members that had a total of 127 years of teaching experience were interviewed. The average was approximately 15.8 years of experience. The least amount of teaching exposure was 12 years, with the greatest being 20 years. The management faculty had taught courses. All management faculty except one had published. All accounting faculty were CPA'S. All but one had published. All accounting faculty had taught courses at all levels. Four of the eight faculty members from the four-year colleges had also taught at the community college level. The faculty in this category held final degrees from Southern Illinois University, University of North Carolina at Chapel Hill, University of North Carolina at Greensboro, Mississippi State University, University of Houston, Texas A&M University, the University of Tennessee, and Elon College.

From the two-year institutions, eight faculty members were also

interviewed. They had a total of 86 years of teaching experience among them. The average was approximately 11 years. All but one had a masters degree. The one with the BS was a CPA and had been teaching for 15 years. What stood out was that all accounting faculty were CPA'S and all of the management faculty had twenty or more years of actual business management experience. Two of the faculty in this group had taught at the four-year level. The faculty members from the community colleges held final degrees from The Pennsylvania State University, University of Tennessee, Central Michigan, University of Chicago, Elon College, Appalachian State University, Wake Forest University, and the University of North Carolina at Greensboro.

A profile of the faculty who participated in this study is provided in Table 1. It includes information about participants' professional rank, degrees held, and teaching experience.

Table 1

A Profile of the Faculty Who Participated in the Research

<u>Professional Rank</u>	<u>N</u>	<u>Degree Held</u>	<u>N</u>	<u>Teaching Experience</u>	<u>N</u>
Community College Business Management Faculty					
Full Professor	4	Masters	4	<10 years	2
				10-15 years	2
Community College Accounting Faculty					
Full Professor	4	Masters	3	<10 years	1
		Bachelors	1	10-15 years	2
				16-20 years	1
University Business Management Faculty					
Full Professor	3	Ph.D.	3	12-15 years	1
Assoc. Professor	1	Masters	1	16-20 years	3
University Accounting Faculty					
Full Professor	3	Ph.D.	3	15-20 years	4
Assoc. Professor	1	Masters	1		

Description of Findings

Eight four-year faculty and eight community college faculty responded to the open statement: Describe in as much detail as possible what you consider to be the distinguishing characteristics of college-level course work.

Based on content analysis ten patterns of college-level course work characteristics emerged and are listed below. The patterns are as follows:

1. Problem solving using higher-level thinking skills
2. Mastery of the subject matter
3. Connections within and across disciplines
4. Maturity of the students
5. Essential knowledge base
6. Course content and faculty expectations
7. Pedagogical issues: writing, reading, mathematics, student evaluations, and textbook
8. Rigor of courses
9. Application of the subject matter
10. Interpersonal skills

This chapter consists of three sections. The first section is an analysis of each characteristic; the second section is a discussion of additional findings; and the third section relates the findings to the research questions.

Characteristics of College-Level Course Work

Faculty comments regarding each college-level course work characteristic are presented as follows: (1) four-year, Business Management; (2) four-year Accounting, (3) community college, Business Management; and (4) community college Accounting, and (5) a summary.

Problem Solving Using Higher Order Thinking Skills

Higher order thinking skills necessary for college-level course work operate on those listed in Bloom's taxonomy: analysis, synthesis, interpretation, evaluation, inference drawing and conceptualizing; all of these are components of critical thinking. One hundred percent of the faculty interviewed felt that problem solving using higher order thinking skills was an important characteristic of college-level course work. Faculty pointed out that complex problem-solving should occur in college-level course work.

Business Management Four-Year University Faculty Comments

The following comments regarding the use of higher order thinking skills in problem solving are representative of those made by the eight four-year business management faculty. Of the eight business management faculty interviewed, eight identified problem solving skills as an important characteristic of college-level course work. For instance, one professor said, "I feel that in college students need to move from a memory mode, most times learned in high school, to an analysis mode. They should be able to think critically and analyze a situation."

Faculty pointed out that critical thinking was not memorization of facts. Another professor said, "I don't just look at the answer. I want to see the students' step by step procedure. I need to see their thought process. Once they arrive at a final answer, I want an analysis. I want them to predict, make a judgement, use it, and that's the written answer." Some faculty commented that students expected the professor to teach exactly what would be included on tests. Another professor commented, "I expect students to know the concepts. They shouldn't try to memorize the book like they did in high school. If they know the concepts, they can pretty much answer the question. In college we not only want students to know the answer but also where it came from." Faculty felt students should be able to use information to continue to learn. Several faculty said they wanted to teach students to "learn how to learn." One professor said, "A college course should be more problem solving because that is what students will be doing in the end." In other words, students are required to solve problems and find solutions in whatever career they pursue after graduation.

One professor said that "the one thing that appears to link together all college-level courses concerns the notion that these courses should cause a student to think critically about problems and draw logical conclusions in regard to the way that problems should be solved. Courses that just involve a straight presentation of the facts with no requirement of the student to think critically are not courses that would be college level in my thinking."

Accounting, Four-Year University Faculty Comments

The accounting faculty expressed much the same viewpoint regarding accounting problem solving using higher-order thinking skills as the business management faculty. All four of the four-year accounting faculty felt problem solving was an important characteristic in college-level course work. One professor noted that in a college-level accounting course he teaches problem solving by "adding complications." He meant taking something that the students accept as basic fact and showing them various interpretations of the fact. He wanted students to be able to analyze a situation and see how the basic facts hold up.

Another professor said that "critical thinking was the most important characteristic of college-level course work and also the most difficult to teach and measure." Another accounting faculty member said "students' abilities whether its a very theoretical class, a quantitative class, or a hands on class should rise to the challenge. Their abilities to synthesize concepts, reason, analyze, draw conclusions and then communicate those effectively, both orally and written, are all critical at the college level."

Accounting faculty also said that most students simply want to memorize the facts but that college-level courses go beyond the memorization of facts to analysis, synthesis, and interpretation. One professor said "college level work must develop thinking skills. Our students must be able to think critically. That should involve decision making and problem solving. In other words, if they have a piece of information or are working on something they must be able to

combine the pieces to generate new ideas. If there is a problem, they should be able to identify the problem and the reason for the problem. They should be able to generate alternatives, evaluate the alternatives, and choose the best alternative."

Business Management Community College Faculty Comments

Community college business management faculty responses that included references to problem solving and critical thinking skills are represented by the following comments. The community college responses closely resemble those of the four-year college business management faculty. Of the four community college business management faculty interviewed, four felt problem solving using higher order thinking skills was an important characteristic of a college-level course. Much like four-year business management faculty, the community college faculty discussed the fact that students want to memorize the information only to pass a test. Faculty expressed an interest in having students become more actively involved in the learning process. The faculty expected students to be able to assimilate, synthesize and analyze information to solve problems. One professor said, "The professor presents a problem to the students and then the students try to research and solve the problem on their own." Another professor said "I try to make a college course a college course. I try not to let them out of here without putting together something that requires problem solving and analytical thinking. That's not easy to do." Another professor said, "in business management there is a lot of problem solving at this level. We give

problems and we expect these students to work through the problems using analytical and critical thinking solutions." This professor further commented that "sometimes professors give students too much information to assimilate; conceptual knowledge is more important than just, fact, fact, fact." A third professor affirmed what this previous professor said: "Learning is indeed working through problems, developing possible solutions, and testing the solutions for answers."

Accounting, Community College Faculty Comments

Community college accounting faculty said problem solving was an important characteristic of college-level course work as the following examples illustrate. One professor commented that "I find the analytical skills the student develops over the course of their studies here are critical. We need to develop those skills because accounting problems might contain a lot of irrelevant information. They have to know what to do, know what to weed out in order to solve this problem, not just punch numbers in a calculator." Another professor said "industry wants someone to do more than just sit in an accounting office and crunch numbers. They want someone who is able to think, communicate information and analyze situations. Basically that is what we are trying to do here." One professor summed up problem solving like this "most of our courses at this level involve problem solving. I don't mean just dry problem solving. This type of problem solving has to do with reading between the lines. Problem solving to the extent that they have to be creative and analytical

thinkers. Everything is not cut and dry in the real business world. There are a lot of decisions that have to be made and we try to give them the tools to help make these decisions."

In summary, all faculty cited problem-solving skills as important to college level course work. This was one of the two areas where faculty from all schools were in total agreement.

Mastery of the Subject Matter

Mastery of the subject matter is closely related to problem solving using higher order thinking skills. If students do not possess a deep understanding of the subject matter, then the students will not be able to solve complex problems. Mastery of the subject matter goes beyond the memorization of facts to an ability to grasp the material and utilize the information to solve problems.

Business Management, Four-Year University Faculty Comments

All four university business faculty made comments regarding mastery of the business subject matter. The following quotations, taken from the four interviews, are representative of the comments. According to one professor, as an early step in mastering knowledge, "college course work should prepare students to take facts and make reasonable conclusions from them." A second professor agreed saying that "students should come out of college with a certain number of facts," but college students also need to "be aware of nuances of words; rhetorical effects." A third professor took mastering knowledge further explaining that students should "try to get at the essence of concepts."

Accounting, Four-Year University Faculty Comments

The four university accounting faculty interviewees included comments about mastering the subject matter. The following quotations are taken from these interviews as representative samples. One professor noted that in college, students "develop a set of skills, in

depth," and "conceptually pull a skill that they have learned to a broader set of applications." Another professor pointed out that college accounting is "...not only doing math but [being aware] of the broad applications of algebra"; a point clarified by a third professor who stated, "students need to master a body of knowledge in order to be successful in the next course" which may be, for example finance. He continued by stating that the result of the mastery of subject matter is that it "raises students' perspectives to a higher level."

Business Management, Community College Faculty Comments

The following comments, taken from the interview transcripts of the four community college Business Management faculty, reflect the need for students to master college course work. One professor noted that college-level work "requires them [the students] to take their acquired knowledge and apply it from everything they've done all semester." A second interview noted that the written "exercises require accumulated and applied knowledge; that which has accumulated over the course of the semester," meaning the student must master the material before it can be applied. Elaborating on mastering subject matter, a third professor commented that "colleges ask us to acquire information; to develop a knowledge base." Another professor developed this idea further saying, as that knowledge base grows "students get better as they go along, it clicks..." Other points mentioned in two of the interviewees were: (a) "Understanding of context and acquiring a vocabulary that is part of the discipline" is

part of mastery, and (b) "a college education should leave the student enriched."

Accounting, Community College Faculty Comments

Two of the four community college accounting faculty discussed mastering subject matter. As one professor noted, in learning when "students attempt to move information into long term memory, if they don't attach the facts to anything, then [they] are not making [their] own knowledge base at all." Another professor commented in a similar vein, saying college students need "to learn toward long term memory." Another interviewee commented regarding mastering subject matter noting "In accounting we don't deal with a lot of high level mathematics. Every now and then an algebra expression will pop up in a discussion. So there is a certain level of mathematics we expect our students to master in order for them to be able to do the work."

In summary, across the interviews, the comments regarding the necessity of mastering subject matter were similar. Those who cited the necessity of mastering course content in college were consistent in their reasoning. As the respondents explained, mastery of course content means remembering the information over the long term because that learning is in context rather than in isolated bits and pieces. Memorizing is not mastery, but it considered the lowest of the cognitive skills (Bloom, 1969).

Eleven of the 16 faculty interviewed mentioned that college-level course work requires the mastery of a body of knowledge. One professor summed up by saying, "Students should be capable of asking

questions and commenting on the material, being able to challenge the professor and the material." Mastering a subject means that students have a thorough understanding of the subject.

Connections Within and Across Disciplines

Making connections within disciplines means that students build a body of knowledge during the course and other courses within the discipline. For example, in business management students learn complex concepts and terminology in order to be able to describe and interpret mathematical data.

Business Management, Four-Year University Faculty Comments

Three of the university business management faculty commented on connections within and across disciplines. One professor noted that connections begin with the "integration of things from prior knowledge"; another, making the same point said connections begin with information "from previous chapters"; and a third continued by stating that college course work requires "bringing information from a lot of sources." The third professor noted that students "need to recognize patterns...that something that occurs on page eight is connected to page twelve, and is beyond the plot." Repeating a point made by a colleague, the third professor also said, "Students have to know the connections, and you cannot know connections without getting information. "One professor noted that " one of the things we felt strongly about was the addition of the technical report writing course to our program. That is an English course but we require it. We feel its important that our students get that and understand why." He continued with the comment that students need to "understand how things hook up."

Accounting, Four-Year University Faculty Comments

Two of the university accounting professors made comments that fell into the connections within and across disciplines category. A point made throughout the interviews was that most college courses are designed to teach skills that will be used in more advanced courses. One professor noted that accounting "students need to master a body of knowledge in order to be successful in their field." Another commented that "it [college-level accounting] is focusing on the connection of disciplines." A professor explained that college students must "draw relationships between topics." Another included both areas of connections in the statement that "college students have to be able to relate in the same course and from course to course." Finally, according to one interviewee, the connection is "applicable outside the classroom." As stated by an accounting professor, students should "see that what they are doing connects to what they've been doing and to where they are going to do." A third faculty member stated, "A good description of accounting connections across disciplines is the notion that accounting provides conceptual models for representing phenomenon in other fields (finance) is a pretty strong image of accounting at the college level now." This faculty member also stated, "It certainly has to be course-work that the student would be able to use in more than one situation," the point being that connections must be made outside of the course work. One professor noted that "At the college level, typically there is still quite a bit of procedural learning but there is more emphasis on showing how those procedures connect to each other, showing how they

have rational bases, having somewhat of a conceptual framework that shows what the big ideas of the course are."

Business Management, Community College Faculty Comments

Four of the community college business management professors made comments regarding college-level course work having connections within their discipline and to other disciplines. The following representative quotations are examples taken from the five interviews. In this study, interview comments were often suitable to more than one characteristic as illustrated here:

I think it is the level of thinking, the demands of thinking, of making connections. I can't imagine teaching anything...without making connections to everything else.

Another professor pointed out, "I don't just mean writing... within the classroom environment, but [writing] that is applicable outside." The third professor claimed that obviously "you cannot make connections until you have information." The professor continued, "I think I would like for them to have an understanding already of the importance of English and math as far as my area goes and how they work together. Not that they are separate entities that you never use at the same time."

Accounting, Community College Faculty Comments

Two of the community college accounting faculty were of the opinion that connections of topics must be made throughout a course. An example, according to one faculty member, is the "accounting reform

[movement] that forces students to interrelate all of the concepts." Another professor noted that college-level accounting requires the "conceptualizer to be able to draw those conclusions and draw out inferences and relationships between topics." But connections in college-level course work must go beyond a particular course, as a third accounting instructor emphatically noted, connections apply "course to course, absolutely; that is one of the defining differences between high school and college." According to the third professor, "it certainly has to be a level of course work that the student would be able to use in more than one situation."

In summary, the comments among and between the disciplines and institutions regarding connections within and across the disciplines were similar. This similarity of comments seems reasonable since both business management and accounting are basically tool subjects that are used extensively across the disciplines in business. A total of eleven of the sixteen faculty interviewed mentioned making connections within and across disciplines as a defining characteristic of college level course work.

When the faculty mentioned connections across disciplines it was usually in association with English and writing skills of the students. In this study, interview comments were often applicable to more than one characteristic. Most faculty did not say specifically that the subject connected to other disciplines; instead the faculty said things like, "I am as much an English professor as a management professor. When I grade written work from my students, I grade for content and grammar." Almost all faculty discussed the importance of

connections across disciplines since most college courses are designed to teach skills that will be used in more than one situation or course. Each discipline was connected either directly or indirectly to another in some way. Material learned in one course is applicable in another course.

Six faculty mentioned connections to other disciplines directly, while others referred to connections in different ways. For example, writing was discussed in all of the interviews and most of the professors said both content and grammar were important in quality writing. Connections within and across the disciplines has been described by Gardner and Jewler (1989, p. 116) as "an integration of knowledge and understanding that allows students to think and create independently."

Students Maturity and Preparation

Preparation means that the students entered college and came to class prepared for college-level content. Desire to achieve is the willingness of the students to take responsibility for their own learning and become actively involved in the learning process. Fourteen faculty discussed preparation, desire of the students to achieve, and maturity as characteristics that are desirable for students to have in approaching college-level course work.

Business Management, Four-Year University Faculty Comments

All of the business management faculty made reference to the need for college students to be mature. According to one professor, one characteristic of a college-level course "is going to be the level of sophistication and the measure of raw intelligence that they come in with." "Maturity is expected," because the assumption, as noted by a business management professor, that "these are fully formed adults" who are responsible students. A third professor noted that due to developing maturity, college "students are beginning to understand that it is okay to have different opinions." A fourth professor contended that "students must evidence the willingness to try. Closed minds cause problems."

Accounting, Four-Year University Faculty Comments

Three of the four accounting professors at the university level asserted that maturity and preparation are important components of college-level work. One university accounting professor summed up the

comments of his colleagues by stating "some of the students are just not ready. I know, they're not ready age-wise. As for maturity, they are still at the you show me and I repeat it 50 times stage; and trying to get them to step up to conceptualizing that my peers know something and I can learn from someone besides the professor, and then I really have to be able to generalize is asking an awful lot of a 17 or 18 year old."

Another professor noted that maturity allows the student "to think about more complex things because one has a broader base or broader background." From another perspective, the third professor noted "I would like them to be responsible, on their own, doing their homework."

Business Management, Community College Faculty Comments

Three of the 4 community college business management faculty emphasized the need for college students to display maturity. Maturity is necessary noted one professor, because it is assumed that "in college the student understands that he or she is responsible for a great deal of the learning." A second professor's comment concluded that maturity is necessary in college, because success is based on "the willingness and initiative of the student." In describing a component of maturity, a third professor said, "Much of academic maturity has to do with how much they read, and what they read." Another descriptive comment made by this professor was that "college-level maturity includes structure in thinking that students have to have which typically they don't have at a younger age." College

students need to be aware of their experiences and ability, "the notion to make someone a little more conscious of their learning." College "students are not closely monitored." A point which was consistently repeated describes the mature student as one who "wants to learn and will take responsibility for that."

Accounting, Community College Faculty Comments

Three of the community college accounting faculty brought up the issue of maturity as a component of college-level course work. In addressing maturity as an age factor, an accounting professor at the community college said one "would not expect someone who is 15 to be able to draw the same conclusions as someone who is 25." Following the same theme, another professor pointed out that "you expect a different level of maturity for the college-level performance. You expect the students to be able to do more on their own, but that is not the course as such, it's a matter of expectation." The third professor optimistically commented that hopefully "the student wants to learn and will take responsibility for that." Other points taken from the interviews include the faculty expectation of "self direction and independence and initiative," and that "there is a maturity component here, in [the student's] mind, the desire and so forth, that is college level."

In summary, at the university level, all of the business management faculty and all of the accounting faculty discussed the need for student maturity, as evidenced in part through responsibility as a characteristic of college-level course work. Six of the

community college faculty, three from business management and three from accounting, discussed the attributes of maturity of the student as a needed characteristic. All of the interviewees when speaking about maturity used the term synonymously with responsibility.

Community college faculty were more apt to stress responsibility of the students. The university faculty stressed intellectual maturity (preparation), although both groups addressed both issues. A similarity in the responses from the different disciplines within the institutions surfaced.

Fourteen of the 16 faculty interviewed mentioned maturity of the student as a characteristic of college-level course work, six from the community college and eight from the university. Many professors interviewed stated that in college, learning is the student's responsibility, the student needs to seize the opportunity to learn. Increasingly more work is done outside the classes as the level of the courses increases.

Essential Knowledge Base from High School

An essential knowledge base means the basic knowledge expected of a college-level student upon entering college. Many faculty commented about spending too much time on basic content rather than college-level content.

Business Management, Four-Year University Faculty Comments

The university faculty expressed concern about the knowledge base that students bring to college, specifically noting that they need writing skills. One professor stated that "in writing, they don't know what a sentence is or what a fragment is; they don't know what syntax is or how to use syntax." The university faculty all discussed how they dealt with lack of writing skill, most requiring re-writes of papers. A few suggested that struggling students go to the college writing center for assistance. Another professor who commented on essential writing skills as preparation for college work, talked about faculty discussions of the need to continue to teach writing in the business management courses because many students do not have the writing skills they need. Seven of the university business management faculty specifically stated that there are essential skills that college students must have; but all of them commented on the fact that students were coming to college ill-prepared.

Accounting, Four-Year University Faculty Comments

Several of the accounting professors shared the opinion stated by one professor that, "accounting requires integrating a lot of pieces

that you have learned in high school mathematics in order to do reasoning of a more complex sort." His colleague said that [a lot depends on] "how much of a grip students have on the knowledge they bring with them." Four of the university faculty talked about the fact that accounting is a course that builds on previous knowledge. One had the opinion that "many students have no clue as to what they are doing, they just plug numbers into a calculator" and he felt that they should have some basic understanding of concepts. Another interviewee expressed professor's expectations" that students be able to handle fractions, percentages, algebraic equations, and calculators, not...just calculators. "They have to be able to take the words off an English page and put them into an accounting (mathematics) page."

Business Management, Community College Faculty Comments

In the words of a community college business management professor, college course work is based on "knowledge and techniques students bring with them from high school," and she went on to state that this base is essential to college-level course work. One of her colleagues continued, exclaiming that "a defining characteristic of any college-level course is the level of expectation." In explaining the high school knowledge base a third professor said that "it includes math skills gained through high school Algebra II, as well as reading and writing ability." Four of the community college business management faculty talked about developing the students' skills based on previous knowledge, and the following comment from the fourth

professor was representative of the group: "College-level course work is on the continuum from what they learned in high school." The interviewee noted that college students are expected to perform beyond high school because of their previous preparation.

One of the interviewees describes the current level of the essential knowledge base that college students need, "The low-skill level of students is a terribly serious problem; I don't think anyone has addressed that to satisfy me." Because students come to college deficient in essential skills, another professor said that he had "found through the years the department loosened its standards. Basic management courses became more and more challenging to teach because more students came in under-prepared."

Accounting, Community College Faculty Comments

Three of the accounting professors specifically talked about the need for students to bring algebra skills to college. As one of them explained, in the beginning college accounting course, students find out that "it is not doing the mathematics, but talking about its applications, so conceptually they pull a skill they have to make a broader set of applications." The skill they must have is from their high school preparation. As a second professor pointed out, "we make the assumption that our students should know how to do this but they don't always know how because of the reality of what went on in the high school." A third professor also made the point that "college math begins after high school Algebra II and builds on that knowledge."

In summary, thirteen of the 16 faculty interviewed felt that college-level course work builds on previous knowledge; six were from the community colleges and seven were from the universities. They were of the opinion that an essential knowledge base is a prerequisite for college-level work. In the words of a community college accounting professor, "College level is one that builds on all those standard high school courses." No disagreement surfaced among the 13 community college and university professors from both disciplines who talked about the necessity of knowledge base to be brought from high school.

Course Content/Professor Expectations

College level course work is defined through both content and approach to delivering this content. The professor must expect and understand that.

Business Management, Four-Year University Faculty Comments

All of the university business management professors addressed course content during their interviews. One noted that it is "the complexity of the content," and went on to say that "college-level demands appreciation of language in every sense of the word." A second professor stated students will "not have had most of what I teach in high school, basically because it is too hard." The third professor commented that in college, students must deal with "complexity of content, the professor should expect this."

Accounting, Four-Year University Faculty Comments

All of the university accounting professors discussed course content as a defining characteristic of college-level course work. According to one, the content of "college-level course work is more sophisticated than high school work, with more complex or subtle concepts." The student is encountering "content [that] is relatively new." A second professor illustrated the concern the community college accounting faculty had about differentiating between course content and approach to teaching content: "I guess my first defining characteristic has something to do with intellectual skills, the thinking, the approach to taking the course, not so much content." So

while course content is mentioned as a characteristic of college-level course work, the approach to teaching that content is part of that defining characteristic for professors. A third professor commented that the approach to "complex content is to facilitate a deeper understanding of the subject." In college course work, "content has more deep and subtle issues." In further explanation, the professor said that it is "content and mode of thinking that is beyond what one does at a high school level."

Business Management, Community College Faculty Comments

All of the community college business management professors spoke about course content and professor expectations while defining a college-level course. One of them said that "college-level course work has, inherent within its content, the opportunity for students to take risks, to understand their personal limits, and then to push beyond limits." Another noted that "it is not so much level as approach. Taking what you know and applying it in writing argument and writing persuasion. It is often the way a course is taught that designates it as college, not necessarily content."

Accounting, Community College Faculty Comments

The community college accounting professors believed that course content is a defining characteristic of college-level courses. As one professor explained, college accounting is on the continuum of the study of high school accounting; "Some of the topics may be similar but they may be dealt with or treated in a different way. Some of the

topics may be brand new, things not touched upon in high school." When the student covers something familiar [the student] should be learning a little bit new about the topic as the second of the interviewees asserted, "getting a deeper understanding." A third commented that "it is both the content as well as how you approach the content and what you do with it."

In summary, all faculty interviewed mentioned course content and expectations as a characteristic of college-level course work, eight from the community college and eight from the university. The community college business management professors discussed the expectations of students in a college course. The approach to teaching a college course appeared to be an important characteristic with this group. As the student matures, the content becomes more sophisticated and the approach to teaching the content becomes more sophisticated. The university business management and accounting professors discussed the complexity of the course content as defining college-level course work.

Pedagogical Issues

Five aspects of pedagogy were mentioned in the defining characteristics of college-level course work: writing, reading, mathematics, evaluation of the student, textbooks.

Business Management, Four-Year University Faculty Comments--Writing

All of the university business management faculty believed that writing is essential in college. One professor emphasized that "they need to be able to write," and went on to state that "the kind of students who have difficulty in the reading have difficulty in the writing." When students experience writing difficulties, a second professor commented that he would point out the mistakes to the student and suggest that the student "go to the writing center; get some tutoring." In commenting on writing, the third professor acknowledged that "they just have a very hard time with it. I am sure part of it is due to the difficulty of the material. Part of it is that they have written very little." Several interviewees explained that business management courses, while discussion based, have required writing assignments. The fourth professor said that he "would like to see a fairly uniform sense of the need to include a real writing component in these classes." He continued, "Yes, they are supposed to be business management classes, but we must face up to the fact that the kids in these classes do not know how to write."

Accounting, Four-Year University Faculty Comments--Writing

Writing is now required in most accounting courses. Many of the interviewees encourage writing, some require it. One professor said, "students are often surprised that papers are required in mathematics based courses." In college "accounting students have papers assigned as in other courses." According to another university accounting professor, "It's entirely different than anything they've had before. Some of the accounting majors are not happy because they have to write." In addition to papers, a professor explained that the take-home examinations require students to "write clearly how they approached the solution to problems, and to explain the final analysis.

Business Management, Community College Faculty Comments--Writing

All four of the community college business management faculty felt that the level of writing was a defining characteristic of college-level course work. One of the professors pointed out that "You assume a level of writing ability at this point" because "good writing is essential to college-level course work." Another expressed the opinion that there is a necessary "prerequisite ability in writing, a certain level of expertise." According to a third professor, the student is expected to know "how to do certain English tasks such as putting together sentences in a paper." A fourth professor said, "A college writer has to be able to use the words and ideas of others in honest and effective ways, which can loosely be called research." A further description of college writing was

provided, the interviewee noting that "College-level writing involves gathering evidence, weighing and balancing, planning, outlining; protracted work." As mentioned previously in the discussion of higher-order thinking skills, an interviewee described college writing as hard because "the synthesis is hard--students cannot ignore key arguments that don't support their theses." Further interviewee comments included, college writing must "include argument and be persuasion heavy. It is analytical writing." In college, "writing has to be an intellectual engagement with the course work." As one community college business management professor pointed out, there is "the notion of write to learn, students need to write for whatever course they are in."

Accounting, Community College Faculty Comments--Writing

Three of the community college accounting professors included writing as a defining characteristic of college-level course work. As one professor explained "the accounting textbook requires that students justify their answers, so they have to write. Not only must college students solve problems but [they must] be able to produce models and explain them in writing." Another accounting professor, while not stipulating writing as a characteristic of college course work, stated that he "requires the students to explain the process." The first professor noted that "the biggest complaint the students had about the writing was not that they had to write but that I would correct their spelling and sentence structure.

In summary, writing has only recently been included in the

accounting courses previously at the community college. This highlights why four out of the four community college accounting faculty cited writing as a college-level characteristic. They were most likely responding to the new push from their discipline's perspective. The fact that all faculty felt that writing is a defining characteristic is rooted in it being inherent in their discipline. Frequent references to college-level writing in the literature indicate that writing skills are essential in college course work (Cohen & Brawer, 1991; McGrath & Spear, 1991; Richardson et al, 1983).

All of the business management professors interviewed mentioned that writing is an essential characteristic of college-level course work. The interviewees spoke from their discipline's perspective, which explains why writing was often mentioned by business management faculty. Furthermore, writing is now required in all of the community college accounting courses. At the university, seven out of the eight accounting faculty interviewed mentioned writing as a characteristic of college-level course work, and these require outside papers. One of them spoke about writing as "essential to learning from an across-discipline perspective," not just for accounting. A total of 15 of the 16 faculty interviewed cited writing as an essential characteristic of college-level course work, seven from the community college and eight from the university.

Business Management Four-Year University Faculty Comments--Reading

All of the University Business Management faculty stressed the necessity of good reading skills for college-level course work. One professor stated that "it is when you learn to embody through reading, you learn to argue and to take these things really seriously that you then become a real reader. A lot of students are not real readers." A second professor said that college students "must become good readers," because the reading material is complex, "and its complexity is important because it has to do with the complexity of human life. The average or below average high school student really doesn't understand that reading has anything fundamental to do with expanding yourself." Another point made was that the "discussion aspect of management classes is about what they [the students] read". Another university business management professor, in talking about what he desired of his students said, "probably 10 times in every class you find yourself saying; but what does it say? What does the text say? What does it say there? What does that mean? What does that sentence mean? Can you put that sentence into other words?"

Accounting, Four-Year University Faculty Comments--Reading

Three university accounting professors included reading as a characteristic of college-level course work. One said we are handing them word problems all of the time." They have to be able to "take the words off of an English page and put it into a mathematics page. They have to take it sentence by sentence and translate it. They have to be willing to read words and that is something our students do not know how to do."

Business Management, Community College Faculty--Reading

All four of the community college business management faculty made reference to reading as a defining characteristic of college-level course work, and all four accounting faculty mentioned it. One professor stated, "There should be a demanding amount of reading in a college-level course. I think it is critical." A second professor commented, "Reading and writing are elements in college [course work] regardless of curriculum." A third noted that, "I want them to read in depth." The fourth business management professor commented:

"In college, one has to work to one's limits and challenge it beyond. One should come in with a grade 12, 13, or 14 reading level, and challenge oneself to go beyond that. How can one expect to get to higher level courses, or understand any science, math, or critical literary analysis if one cannot read at that level; and not just read but comprehend and understand. Critical literacy has to be an element of college course work".

Accounting, Community College Faculty Comments--Reading

Three of the four community college accounting faculty felt that reading with comprehension was important to college level course work. One faculty member said it best for all. "You have to have that knowledge and that language that accountants speak. You then have a better chance of succeeding. You are only going to master this through reading, reading, and more reading."

In summary, the similarities input from interviewees within the institutions are attributable to the discipline. Three accounting professors from the university level mentioned reading as a characteristic of college-level course work and three of the community college accounting professors discussed reading. The community college business management professors discussed reading and cited it as essential, but their comments did not describe the type of reading. The university business management professors described the type of reading they expect. The business management professors from both institutions indicated that reading for college courses greatly exceeds what students have done in high school both in quantity and in complexity.

While all eight of the business management professors mentioned reading as a characteristic of college-level course work, only seven of the accounting professors mentioned this characteristic.

*Business Management, Four-Year University Faculty Comments--
Mathematics*

Many of the faculty members interviewed referred to math skills

as they were discussing reading and writing. One business management faculty member said "you tell them to read a chapter, its like you told them to read a book. The processing skills, the math skills, they are many times lacking. You need these skills to do college-level work." Three of the four business management faculty made reference to math during their interviews on college-level course work. Another stated that "when I have them do research papers, I give them a scenario where they have to calculate something or prepare something like a break-even analysis." A third stated "in the school of business, we have what we call a math test that is required for all students. It is a requirement for all the business majors. We need early on to have some concept of their math skills. If they are weak we recommend prep courses."

Accounting, Four-Year University Faculty Comments--Mathematics

All of the accounting faculty spoke about math being crucial in college-level course work. As one professor put it "here we are getting back to the 3R's. But, we are applying it to the specific discipline. When I have a student at the sophomore level who doesn't understand fractions, I've got problems." A second professor stated that "in my particular area the basic skills are important. There is a certain level of expected math proficiency. For us it enhances the analytical skills."

Business Management, Community College Faculty Comments--Mathematics

Three of the four business management faculty referred to

mathematics as important to college-level course work. One faculty member commented "I would love for the students to be able to deal with a decent level of mathematics and not be afraid of it. They are going to have to use it someday." A second faculty member noted that we ought to be able to expect students to have adequate math abilities when they reach this level.

Accounting, Community College Faculty Comments--Mathematics

Three of the four accounting faculty also talked about mathematics being important to college level course work. A faculty member stated "we comply with the state core in math, but we have added extra algebra courses to strengthen our programs." A second professor said "we certainly expect them to have the basic math and English skills. They have to take placement tests. A third faculty member replied "I think the math skills have to be there. We are not talking about real complicated math for accounting. Some students get bogged down because they are afraid." She went on to say "I need to know students can do simple math and some algebra, they will need that just to do the mechanics of accounting. So if they come in doing the basic math and being able to write a sentence then I can direct what I want them to say to me."

In summary, thirteen of the sixteen faculty members interviewed saw math as being an important tool in college-level course work. They felt the students had to master a certain level of math along with the other basic skills of reading and writing. This mastery was necessary for them to just to be able to communicate. The

expectations are there for both the two-year and four-year students. The expectations are the same. The faculty must respond to industry expectations. As one professor put it "all you have to do is get a reputation of putting out students that can't perform and industry stops coming to recruit."

Business Management, Four-Year University Faculty Comments--Student Evaluation

University Business Management faculty interviewed felt students should be graded by papers they write and by written examinations. Faculty also use "weekly quizzes [to] keep students on target and lead into class discussions." The essay test format was preferred by those interviewed. As explained by a second professor they "place an emphasis on the students' ability to recall and organize what they have learned, and then write about it". As at the community college, the university business management faculty used "essay exams for mid-terms and finals" and, of course as noted by one professor, "we need to give comprehensive examinations." Another professor pointed out that his students are challenged because "I use abstract essay exams," which he felt distinguished a college-level exam from high school level. All of the business management faculty expressed the need to include evaluation of students as a defining characteristic of college-level work.

Accounting, Four-Year Faculty Comments--Student Evaluation

Several times during the interviews faculty used the expression

"regurgitation of homework." In discussing evaluation, one of the accounting professors stated that in college "tests are not regurgitation of homework." It was also noted by two of those interviewed that the expectation is that there will be "comprehensive evaluation." As one faculty member talked about evaluation, he explained, "college exams require critical thinking. We are trying to get [the student] to see the concepts and how to apply the concepts. We are not trying to get a regurgitation on the test of what we taught [them]. We want [the student] to apply what has been learned in slightly new settings, not exactly, not completely different, but we want it to be somewhat different so they have to think."

Business Management, Community College Faculty Comments--Student Evaluation

All four of the community college business management professors mentioned the way students are evaluated as being a characteristic of college-level course work. Contrasting high school-level and college-level examinations, the community college business management professors stated that they "give comprehensive examinations"; and that the usual formula for over-all course evaluation is a mid-term and final examination, several quizzes, and several papers. A second professor commented that she uses "essay exams and papers to arrive at a grade in the course."

Accounting, Community College Faculty Comments--Student Evaluations

An accounting professor from the community college stated that

the "rigor of college is expressed in the exams, the type of questions that are asked." College examinations were further defined as "requiring interpretation and the drawing of inferences." Accounting faculty from both institutions stressed that college examinations are "not like high school tests that regurgitate homework problems; they require critical thinking skills." As one professor commented, college examinations are "comprehensive exams, of course." Another professor noted that he thought "when you get right down to differentiating a college course, one of the characteristics should be the type of testing that is done. The level of response that is required--getting away from the purely mechanical, where interpretation and being able to draw those inferences" is essential.

In summary, 15 of those interviewed described the type of student evaluation that occurs in college as one of the defining characteristics of college-level course work. Of those who included evaluation as a characteristic, there was much similarity in the comments across the colleges and disciplines. This choice of student evaluation as a defining characteristic reflects the opinion of Adelman (1986) who noted that in order to know college-level learning is taking place, objective tests should be abolished and students should be graded on the quality of their thinking as expressed through their writing.

The professors described the kind of evaluation that is characteristic of college-level course work. According to the interviewees, college examinations are comprehensive, usually in essay format, and do not repeat questions from homework assignments. A

university business management professor stated that one of the biggest complaints she got about the business management tests was that they were not like homework. It is interesting to note here that the term "regurgitation of homework" was used by three business management professors, two from the university and one from the community college. All of the community college and university business management professors commented on evaluating their students through their written work. These professors also included short quizzes and examinations with essay test questions in their evaluation process. This characteristic was included as defining college-level course work because the interviewees described it. Fifteen indicated it should be a defining characteristic of college-level course work.

Business Management, Four-Year University Faculty Comments--Textbook

Four of the university business management professors included the effect of the textbook as a characteristic defining a college course. One professor felt that "in general [texts] are a way too prominent on college campuses because often they are written at a less than college level. Often they put students in the position of thinking that the book is right, the answer is in the book, it's all settled."

Accounting, Four-Year University Faculty Comments--Textbook

According to one of the three accounting professors who discussed the affect of textbooks, "the text in some ways does drive the course". We are trying not to let it define it." Another professor

made the same comment, "We use the same textbook in lower level courses...with so many professors teaching the course it wouldn't work otherwise. We can't let them use a different textbook"; while a third professor commented that "we need the text as a common guide to exactly how to present [the material]." The following excerpts from the interviews present the views of accounting faculty on textbooks. One professor said, "College textbooks are often written by college professors teaching the subject," so the assumption can be made that the "better people are writing these books and that they are trying to maintain an appropriate level as opposed to just writing a book for the mass market. Therefore, textbooks used as a defining characteristic is not incongruous." Another professor commented, "These texts are commonly written by people who are teaching a college course--the same course you are buying the text for." Adding to the comments about textbooks, a professor said, "Textbook publishers ascertain through marketing research that in order to get adopted by an institution, they have to include specific topics; and soon they are meeting the needs of the accounting departments; ...certainly the textbook is a huge factor in driving what you teach." Still another professor related, "Textbook writers go a long way toward defining what that course is and even there you run into a problem because you can find the same college-level text being used in high school."

Business Management, Community College Faculty Comments--Textbook

A community college business management professor commenting on the criticisms of higher education, discussed the concern about

textbooks becoming less rigorous. She stated that "textbooks have been 'watered in content' to some extent"; an expression also used by a university professor interviewed in this study. "The reading level and the length of selections, [and] the vocabulary have gone down." She felt that the publishers are, to some extent, defining adult concerns the same way society does. Four of the community college business management professors included textbooks as a defining characteristic of a college-level course.

Accounting, Community College Faculty Comments--Textbook

The following two comments convey the two streams of thought concerning college course work and textbooks at the community college. One professor noted that "once a textbook hits the market and becomes a popular text, it becomes a defining characteristic of that accounting course across many institutions." A second professor commented that, "the professor selects the textbook most appropriate to how the professor understand the course, and at what level. The choice is not made by "let's define the course." Three of the community college accounting professors discussed the effect of textbooks in defining college level course work.

In summary, four business management faculty commented on the fact that publishers are producing less rigorous textbooks. Another similar point from the interviewees was the need at both institutions to use the textbook as a course guide. The same text is used in all sections of a course at the universities in the first two years of business management and accounting. The same policy was used at the

community colleges where the text serves as a guideline for the large number of part-time professors. The accounting faculty from both institutions appeared more concerned about the textbooks than the business management faculty. This outcome is most likely based on the finding that business management professors did not rely as much on textbooks as accounting faculty.

A total of 14 of the 16 professors interviewed mentioned textbooks as a defining characteristic of college-level course work, 7 from the community college and 7 from the university.

Rigor

Thirteen of the 16 faculty interviewed saw rigor as an essential part of college-level course work. Seven of the four-year faculty and 6 of the two-year faculty indicated its importance.

Business Management, Four-Year University Faculty Comments

Three of the university business management faculty described rigor during their interviews as a characteristic of college work. An interesting point made by the first professor was that "college students need to be willing to take risks, to live in uncertainty, and to struggle to answer questions." The rigor is there because college professors often do not supply "an answer in a box," leaving the student to "find the answer" and "to be comfortable with the fact that there may be more than one correct answer."

According to a second professor, rigor in college course work results in a challenge to the student that often causes discomfort. The rigor is "reflected in the ambiguity in language" in the study of problems. He noted that "a college education should ...let students feel a little bit comfortable with not having all the answers, right now."

Accounting, Four-Year University Faculty Comments

All four of the university accounting professors mentioned rigor during the interviews. One commented that "there is a faster pace than in high school," which adds to the rigor of the course work. He went on to say that he believed "the work is more challenging because

students have left perhaps 50% of the students they know behind and the competition has increased." His colleague said that rigor is expressed in the "amount of time the student must spend outside of class in preparation".

Business Management, Community College Faculty Comments

Of the four business management community college faculty interviewed, three stated that rigor should be considered a defining characteristic of college-level course work. One professor noted that she was "going to try to challenge the students." A second compared academic rigor to growing pains, saying, "it's painful, but what ultimately happens? You reach your potential." A third commented, "so make them stretch." The second professor who commented on growing pains went on to talk about college-level course work saying, "I think at its heart college-level work has to be intellectually and emotionally discomfoting. It must make one very, very uncomfortable and I think the over-used and trite word is challenging."

Accounting, Community College Faculty Comments

The rigor of college-level course work was clearly delineated by one accounting professor who said, "the type of testing that takes place; the way students are expected to perform in examinations, and the level of response that is required; how deeply they [the students] understand the topic." He went on to explain that college course work gets "away from the purely mechanical into interpretation and to students being able to draw inferences." Part of the rigor of college

course work is "the amount of and type of out-of-class preparation." Three community college professors included rigor as a defining characteristic.

In summary, 13 of 16 interviewed cited rigor as a characteristic of college-level course work. They mentioned rigor and its resultant challenge as a characteristic of college-level course work, 6 were from the community college and 7 were from the university.

Application of the Subject Matter

A large majority of the faculty interviewed discussed application of the subject as a distinguishing characteristic of college-level course work. Faculty referred to application as the student's ability to utilize the information in problem solving.

Business Management, Four-Year University Faculty Comments

Three of the 4 university faculty interviewed remarked about the importance of application. One professor commented, "Theory and application both are very important in a college-level course. Another faculty member stated "Basically, what I do is take a student at the beginning of a semester where a student doesn't know an export from an import and three months later that student is able to think critically about international marketing problems and in addition to that, actually in some cases successfully engaged in the international marketing process selling products made by Triad-area manufacturers to a customer in Malaysia. So applying what they learn is a very important part of the process of learning at the college level."

Another faculty member said that she "feels the students have to be involved in doing the problem, doing the work, writing, and thinking. It has to be a pro-active approach to learning. They cannot sit there and watch me write on the board constantly. Knowledge does not sink in through osmosis. There has to be some application (work)!"

Accounting, Four-Year University Faculty Comments

All four of the four-year accounting faculty spoke about application as a distinguishing characteristic of college-level course work.

One faculty member started out by saying, "We are an applied discipline much like nursing and law. Here you know and accept the fact that you learn a lot by doing." The second interviewer stated "when you have to perform on a job task that's when you really know if you know." I expect students to be able to apply what they know. As another faculty member pointed out "you never really know how well you know it until you have to apply it in a situation.

Business Management, Community College Faculty Comments

All four of the community college business management faculty made reference to application of the subject matter as a defining characteristic of college-level course work. One professor stated "paper is fine and I will accept it when you walk in and give it to me. It indicates that you know something. Now, let me see you do it. If you can do it, then I'm behind you 100%." A second faculty member said I'm big on doing, on preparing my students to go out there and do a job and that's what I practice with my students. A third faculty member said "in my supervision and management classes, I give them real life cases and they have to apply the material."

Accounting, Community College Faculty Comments

All of the accounting faculty at the community college also cited

application as a very important characteristic of college level course work. The first accounting interviewer stated "I like to think that we teach from a conceptual stand point. However, we are probably heavier on application than some of the four-year institutions. Another said " I just placed a student last week with a CPA firm. Not only will she get to apply what she learns in class but also be in line for a job offer after graduation.

In summary, 7 out of 8 faculty members from the four-year universities and 8 out of 8 two-year faculty members from the two-year colleges emphasized application of the subject matter as an important characteristic of college-level course work. Through internships, students were pushed to get as much hands on experience as possible. Providing this experience is common at both two-year and four-year schools. Responses were similar from both university and community college faculty.

Interpersonal Skills

During these interviews 15 of the 16 faculty members interviewed spoke about interpersonal skills as being an important component in college-level course work. In the discipline of business, team work is being emphasized. The development of skills that allow people to work well together, communicate, and solve problems as a team are critical. As one professor stated, "The old way doesn't work any more. There is not much room for individualism."

Business Management, Four-Year University Faculty Comments

All of the business management faculty spoke about the importance of interpersonal skills today at the college-level. One faculty member pointed out the students have to get comfortable working on teams and making presentations as a team." Another noted that they have to begin to see themselves as a cohesive group as opposed to independent students. A third business management faculty member said "Just because a student has a fair amount of intelligence doesn't mean that individual is going to be able to work well in a group situation." He continued "some students are intelligent in a premadonna sense where the student doesn't work well with other people and uses intelligence destructively." All of the faculty in this group said they let their students evaluate each other's performance when students work in groups.

Accounting, Four-Year University Faculty Comments

Three out of the 4 faculty members have referred to interpersonal

skills as being needed for college-level course work. One university accounting professor said "I will group them in groups (teams) of 2,3, sometimes 4 and they will be required to present a case." He further stated, "The team concept is designed to build those interpersonal skills, that is being able to work with people and being a team player." A third professor said she tries to impress upon the class that they are a team and that everyone has the same goal. A faculty member stated, "I look at how they work in groups. I see how they interact. I just observe the process and see if leaders emerge."

Business Management, Community College Faculty Comments

At the community college level all four of the business management faculty emphasized including interpersonal skills and team work as they talked about college-level course work. A faculty member said "I want students to take the material I give them and apply it to something, but I want it done as a team." He further stated, "I have conflict on those teams. I tell them this is real life, you work something out. These situations help build interpersonal skills." Another of the two-year management faculty said "we do group work. The big buzz in the workplace today is to develop interpersonal skills, to work in teams." He also stated "some people will enjoy it, some people will not. But, everybody gets the chance to do it!" A fourth faculty member pointed out that "since we are moving towards teams, we need to be able to learn how to get along with people, work with people and accept their ideas, and have them accept our ideas."

Accounting, Community College Faculty Comments

All four community college accounting faculty responded that interpersonal skills were relevant to college-level course work across their discipline. One accounting professor stated "I break my students down in small groups. I give them some basic information, then I ask them some specific questions that I want answered. The group has to do research and they have to lean on one another, because the grade is a group grade. This to me is the best way to help build interpersonal skills." Another pointed out that "she would pick out certain segments of information and use the group approach to deal with it. I will stand back on the sidelines and let them interact with each other. I want to observe their interpersonal skills." This faculty member summed up the sentiment of the entire group noting that "we need to see more cooperative learning in education. It needs to start from the ground up. I think its critical because, when students get in the workforce they will be working in cooperative settings."

In summary, 15 of the 16 faculty members interviewed saw interpersonal skills as critical to college-level course work. The comments and examples from the two-year and four-year faculty were similar. Both groups seem to see the need for interpersonal skills at the college-level as important. They realized that the next step for their students was the real world. There students would definitely have to be able to apply these skills. At both the four-year and two-year schools a lot of effort is being expanded to use teamwork in class settings to enhance interpersonal skills.

Additional Findings

During the course of this study, the researcher was invited to attend the meetings of the Joint Board of Community Colleges and four-year universities in the state of North Carolina. The researcher represented the community college articulation effort by the University of North Carolina at Greensboro. The North Carolina General Assembly had just issued a mandate for all schools to move forward on the seamless education system in North Carolina between the community colleges and the four-year institutions.

College transfer programs for the arts and sciences were moving along without much resistance. There was just the need to establish parity in hours, course content, and faculty delivering in the classroom. The community colleges changed to the semester system to match the four-year in 1998. The course content was jointly studied for the arts and sciences and adjusted to meet both institutions specifications. Any differences were resolved in the arts and sciences through meeting the standards of Southern Association of Colleges and Schools the accrediting agency for both institutions.

Technical Programs presented a different situation. From the beginning these programs at the community college level were designed as workforce preparedness programs. Approximately 46 hours of a 64 hour degree program was for what is called work preparation courses. The other 18 hours were usually arts and science courses. These persons were not historically intended for college transfer programs. More and more of these students, however, want to transfer to the four-year institutions. In the past this transfer has meant loss of

substantial credit hours. The four-year institutions refused to look at many courses in these programs as college-level course work.

Prior to becoming involved with this program at the University of North Carolina at Greensboro, the researcher realized after taking courses at Virginia Polytechnic Institute and State University some of the problems that existed between the two-year and four-year schools. Furthermore, the researcher found that some research had been completed describing college-level course work at the two-year and four-year level at Virginia Polytechnic Institute and State University in the area of the arts and sciences. This work was completed by Miller (1996) and Samani (1997).

The researcher found that no attempt to define the characteristics of college course level course work in the technical areas had been completed. While at the University of North Carolina at Greensboro from 1996 to 1998 the researcher watched the number of articulation agreements in the technical area go from 5 to 55. North Carolina has 58 community colleges. In further dialogue with Dr. James Hoerner and Dr. Samuel Morgan, who both have wealth of community colleges and four-year experience, the researcher learned more about the status of the technical programs at the two-year institutions.

Meanwhile, at the University of North Carolina at Greensboro the researcher was completing with Dr. Benton Miles and Dr. John Young an internship to determine how to make the articulation agreements work at the University of North Carolina at Greensboro. The researcher did a check of the records at the University and found community college transfer students in the technical areas including business, doing as

well as, and in many cases better than, some of the students who came in as freshmen.

The researcher realized that a course by course transfer would be a very difficult route. The format that was finally settled on was an articulation agreement that would speak directly to related areas. For example, accounting at the community college would be accepted by the accounting department at the University of North Carolina at Greensboro. A block of credit would be given for the completed degree at the community college. The courses would be all taken together and there would be a contract to show parity. Within the block of credit UNCG would recognize content and allow that content to satisfy certain degree requirements. This resulted in a huge savings of credit hours for the technical transfer students.

Faculty with both Two-Year and Four-Year Experience

The researcher had the opportunity to interview faculty members that taught at both the community college and the four-year university. Four of the four-year faculty interviewed had two-year experience and two of the two-year faculty had four-year experience. Interestingly, their responses were very similar. As one four-year faculty member put it:

I taught two years in the community college setting. I have taught eight years at the four-year university. This teaching has afforded me a rich background. I have taught many different types of students. I have taught courses to students of all ages, races, and ethnic backgrounds. In terms of my philosophy of a students ability to learn and my teaching methods, it is the same. I applied it equally at the two-year institution as well as to the four-year university. I was consistent with that. What I do see happening is that now we are getting more non traditional students at the four-year level like we did at the two-year level. The demographics of the students are very similar now.

This faculty member's response tended to sum up the feeling of the others with two-year and four-year experience. Another four-year faculty member put it this way:

my sense is that the two-year students here are doing as well or even better than our traditional students. I say this because they tend to be a bit more mature. As I say this, I have one student in mind. This young woman has a family, she had to give

up a couple of things to come here. She is anxious to complete her degree and make things happen. I don't think there is any problem with the quality of a transfer student. I push them with equal vigor. My experience at the two-year level taught me that. Anything that can be done to help the students in the two-year schools move to the four-year schools, to transfer more easily, should be done. I think that's a positive and it's good for the student and it's good for us.

A third four-year faculty member commented, "I have some two-year college experience with two-year colleges in New York State. In the business curriculum, in what they call the core courses, they use the same books used at the university level and there was really no difference. People in the area knew that and these graduates were sought after."

A two-year accounting faculty member with four-year experience put it this way:

I have taught at the business school level, community college level, and the four-year university level. When I look at my community college students and my four-year university students my perception of what is expected of a college student is the same. We are preparing students to be life long learners and for some type of career. I don't see a lot of difference between the accounting program at the community college and an accounting program at a four-year institution. By the end of our students first year they are what I call full fledged college students. That is maturity wise, academically and everything else. We are

now finding a lot of students who have come to the community college to obtain those skills they may not have gotten at the four-year university. We have students with four-year degrees that are coming back to us in order to maintain those skills they need to pass the CPA exam. You see the CPA exam is getting stricter and stricter. North Carolina like many other states are requiring one hundred and fifty hours of credit. We find most of the students coming back to the community college to get those credits. As I told you, I have taught at both two-year and four-year institutions. I don't approach my courses any differently.

As the researcher interviewed these faculty members it became evident that the faculty that had taught at both institutions had strong feelings about an equal approach to college-level course work. At the two-year and four-year institutions their philosophy and approach to teaching the students were the same. There were stark similarities in the interviewees discussion of the defining characteristics of college-level course work.

Summary of the Findings

The categories that resulted from the first stage of analysis were studied to ascertain similarities across and among all interviewees that could indicate defining characteristics of college-level course work. This examination of the data revealed 10 characteristics common across the community college and the university, and across the subject areas of business management and accounting.

The first characteristic, problem solving, included the use of higher-level thinking skills of analysis, synthesis, interpretation, evaluation, conceptualization, critical thinking, and the drawing of inferences. The category of pedagogy included evaluation methods, writing, mathematics and reading requirements, and the affect of textbooks.

In general, this research determined that the community college and university business management and accounting faculty interviewed for this study believed that college-level course work is designed for mature learners who take responsibility for their learning. Course work involves problem solving utilizing higher-level thinking skills, drawing on knowledge and techniques previously learned in other courses and disciplines. Courses are reading and writing intensive based on sophisticated inquiry and math where the answer is seldom apparent. Mastery of course material is essential not only because it is evaluated through comprehensive essay examinations but because it is connected to further course work and applications beyond the classroom. Interpersonal skills were emphasized, with these lifelong

learners being prepared for the workforce, emphasis is being put on teamwork. The following gives a brief overview of the results of the interviews:

Problem solving using Higher level Thinking Skills.

Sixteen out of 16 faculty members interviewed mentioned problem solving skills as essential to college-level course work.

- *Mastery of Subject Matter.* Eleven out of 16 cited mastery of the subject matter as important to college-level course work. All 8 of the four-year faculty referred to it, but only 3 of the 8 community college faculty did.
- *Connections Across Discipline.* Eleven of the 16 faculty members referred to connections across the discipline as important to college-level course work. Five of the 8 four-year and 6 of the 8 two-year commented on this area.
- *Maturity of the Student.* Fourteen of the 16 faculty interviewed spoke about maturity of the student being important to college-level course work. All eight of the four-year and six of the two-year faculty commented on this area.
- *Essential Knowledge Base From High School.* Thirteen of the 16 faculty members acknowledge the fact that knowledge base from high school is essential in college-level course work.
- *Course Content/Teacher Expectations.* All 16 of the faculty interviewed referred to course content and teacher expectations as important to college-level course work.

- *Pedagogical Issues*

Reading Fifteen of the 16 faculty members cited reading as an important element in college-level course work. All eight of the four-year faculty cited it and seven of the eight two-year faculty cited it.

Writing Fifteen of the 16 faculty members interviewed stated that writing skills were essential to college-level course work.

Mathematics Fifteen of the 16 faculty interviewed indicated that a certain level of understanding of mathematics is important to college-level course work.

Student Evaluation Fifteen of the 16 faculty interviewed felt that student evaluation was important to college-level course work.

Textbook Fourteen of the 16 faculty interviewed felt the quality and level of the textbook was essential to college-level course work.

- *Rigor of the Course.* Thirteen of the 16 faculty interviewed saw rigor as an essential part of college-level course work. 7 of the four-year and 6 of the two-year faculty indicated its importance.
- *Application of Subject Matter.* Fifteen of the 16 faculty interviewed implied that application of the subject matter was important. All of the community college faculty and 7 out of 8 of the four-year faculty indicated it was important.
- *Interpersonal Skills.* Fifteen out of 16 faculty interviewed linked usage of interpersonal skills with college-level course work.