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School of Education

DEVELOPING LIFE SKILLS: PERCEPTIONS OF GRADUATES OF THE ADULT, NON-TRADITIONAL BUSINESS AND MANAGEMENT PROGRAMS AT INDIANA WESLEYAN UNIVERSITY

A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Joseph Robert Flowers

August 2003

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DEVELOPING LIFE SKILLS: PERCEPTIONS OF GRADUATES OF THE ADULT, NON-TRADITIONAL BUSINESS AND MANAGEMENT PROGRAMS AT INDIANA WESLEYAN UNIVERSITY

A dissertation presented in partial fulfillment of the requirements for the degree Doctor of Philosophy

by

Joseph Robert Flowers

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James Jeffery

To the memory of my father James L. Flowers 1928-1985

ABSTRACT

DEVELOPING LIFE SKILLS: PERCEPTIONS OF GRADUATES OF THE ADULT, NON-TRADITIONAL BUSINESS AND MANAGEMENT PROGRAMS AT INDIANA WESLEYAN UNIVERSITY

by

Joseph Robert Flowers

Chair: Lyndon Furst

ABSTRACT OF GRADUATE STUDENT RESEARCH.

Dissertation

Andrews University

School of Education

Title: DEVELOPING LIFE SKILLS: PERCEPTIONS OF GRADUATES OF THE ADULT, NON-TRADITIONAL BUSINESS AND MANAGEMENT PROGRAMS AT INDIANA WESLEYAN UNIVERSITY

Name of researcher: Joseph R. Flowers

Name and degree of faculty chair: Lyndon Furst, Ed.D.

Date completed: August 2003

Problem

Indiana Wesleyan University teaches all of its adult courses using 10 skills as a foundation. This study determined the perceived attitudes of its graduates regarding the importance of and their relative progress in these 10 areas.

Method

A survey questionnaire was developed and a stratified random sample of graduates was surveyed. A two-way analysis of variance was used to analyze the differences and interactions among the graduates based on two variables: major and gender.

Results

Graduates perceived the following four skills as "very important":

Problem Solving, Oral Communication, Writing Effectively, and Ethics. Six skills were perceived as "important": Teamwork, Lifelong Learning, Critical Thinking, Reading Materials, and Christian World View. Graduates further perceived themselves as evidencing "considerable progress" in the following eight skills: Teamwork, Writing Effectively, Oral Communication, Problem Solving, Lifelong Learning, Critical Thinking, Information Literacy, and Ethics, and "some progress" in the remaining two skills: Reading Materials and Christian World View.

Conclusions

While considered to be important, the skill of the Christian World View was perceived by graduates as the least important of the skills. Graduates felt that although they evidenced some progress, the Christian World View skill was perceived as evidencing the least amount of development. Problem Solving and Oral Communication skills were perceived as the most important skills, and Teamwork was perceived by graduates as the skill evidencing the most progress.

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My family is owed a tremendous amount of gratitude. My children, Melanie, Gregory, and Megan, endured many nights without me at home and suffered through my many job changes and family moves in order for me to finally realize this goal. My wife, Marilyn, is owed so much that words cannot describe. She has been my biggest encourager throughout the years. Without her love, patience, and support, I would never have achieved *any* of my goals.

Most of all, I wish to thank my Lord and Savior, Jesus Christ, for changing my life and giving me the constant, daily direction needed to stay in His will and within His plan (Jer 29:11).

CHAPTER I

INTRODUCTION

Background

Indiana Wesleyan University has chosen 10 life-skills as keys to a graduate's success. Each course within the Indiana Wesleyan University's Adult and Professional Studies curricula has been developed with these 10 life-skills in mind. These 10 skills form the foundation for this study. Since Indiana Wesleyan University places such a high emphasis on these key life-skills, this research is vital in order to determine how graduates perceived these skills as being important to be taught and how much progress they felt they evidenced while a student.

Indiana Wesleyan University is a Christian liberal arts institution offering undergraduate and graduate degrees to students on its main campus in Marion, Indiana, regional campuses in Indianapolis and Ft. Wayne, as well as to adult students at 70 sites and in 39 cities throughout the State of Indiana.

Indiana Wesleyan University's campus was started and operated as Marion Normal College from 1890 to 1912. During this time period, its population grew to 2,000 students. In 1912, the college was moved to Muncie, Indiana, which formed the foundation for the beginnings of Ball State University, formerly known as Ball State Teachers College. The City of Marion struggled to continue its own college, Marion

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Normal Institute (1912-1918), which became, at that time, well known in Indiana for its teacher education. Financial difficulties and World War I forced Marion Normal College to close its doors.

In 1906, the Wesleyan Methodist Church had established the Fairmont Bible School in Fairmont, Indiana. The Wesleyans were eventually persuaded by the City of Marion to purchase the Marion campus and its empty buildings. Following the purchase of the Marion campus, the Indiana Conference of the Wesleyan Methodist Church decided to reopen the Marion facilities and, in 1920, Fairmont Bible School became the new Religion Department of Marion College.

Marion College continued to grow and in 1988 the name was changed to Indiana Wesleyan University. The rationale for the name choice, briefly stated, was: "University—enrollment growth and graduate programs, Wesleyan—identification with the sponsoring denomination, Indiana—identifying with the Midwest rather than a city for marketing" (Elder, 1994, p. 376).

The Adult and Professional Studies Programs at Indiana Wesleyan University had its origins in 1984. The Institute for Professional Development approached the University with the idea of starting adult education programs. The Institute for Professional Development is a higher education development and management corporation established to conduct research and development activities with respect to adult education needs and trends. The primary mission of the Institute for Professional Development is to assist accredited private colleges and universities in expanding and diversifying their academic offerings and student population base. For Indiana Wesleyan University, the Institute for Professional Development does this through the marketing of Indiana Wesleyan

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University's academic degree programs designed to meet the educational needs of working adults. Since it was founded in 1973, the Institute for Professional Development has accomplished this mission by contracting with colleges and universities to assist them in marketing unique adult-oriented degree programs specific to the needs of the institution and the markets they serve.

The Institute for Professional Development had identified a number of schools in Indiana that had the capabilities to develop, market, and administer their established programs. When first approached, Indiana Wesleyan University felt that "there was absolutely no interest in this" (Elder, 1994, p. 361). However, through months of meetings and site-visits to other Institute for Professional Development institutions, Marion College signed, in March of 1985, an exclusive contract with the Institute for Professional Development to offer adult programs in the State of Indiana.

Beginning in August of 1985, Marion College's Adult Education Program was initiated under the name of Leadership Education for the Adult Professional (LEAP). The approach was modular in format and provided curricula designed for working adults who had started college in the past, but due to job responsibilities, could not leave the job market to attend college on a full-time basis. The initial offerings included two undergraduate degrees, the Bachelor of Arts in Management and Bachelor of Arts in Administration, and two graduate degrees, the Master of Science in Management and the Master of Business Administration.

Leadership Education for the Adult Professional classes were formed in cities across Indiana. Because of the modular design of its curricula, Marion College was able to reach a larger and larger student population. Students were attracted to the packaged

time blocks of evenings and Saturdays, books were provided at the individual locations, and several companies supported their employees through tuition reimbursement programs. Enrollment in Leadership Education for the Adult Professional programs continued to climb with additional majors and programs eventually being offered. At the time of the commencement of the research for this study, in 1999, total enrollment in all Adult and Professional Studies programs was over 4,700 students, including over 1,100 in the A.S. in Business, 1,000 in Bachelor degrees, and close to 1,000 in the graduate degrees. Totals are shown in Table 1.

Table 1

1999 Adult and Professional Studies Enrollment

Degree	Enrollment
General Education Electives	288
Associate of Science in Business	1,159
B.S. in Business Information Systems	116
B.S. in Management	477
B.S. in Business Administration	626
Registered Nurse Bachelor of Science	316
Master of Education	666
Master of Science in Management	236
Master of Business Administration-On Line	33
Master of Business Administration	<u>790</u>
Total	4,707

The foundational program in the Adult and Professional Studies Business and Management Division is the Master of Business Administration (MBA). The various components of the program curriculum, its learning resources, and faculty have been

selected to produce specific outcomes. These outcomes, while reflecting traditional academic practice, also focus on the functional competencies for working adults. Students not only acquire a functional knowledge of managerial economics, accounting, finance, and management, but equal attention is given to the development of written and oral presentation skills, group process skills, and an understanding of business ethics from a Christian worldview (IWU, 1997, pp. 45-48).

The Master of Business Administration program emphasizes the acquisition of the more traditional technical management skills within a peer (cohort) group or management team context. Generally, each course requires study group activities, which have been designed to simulate real-world group decision-making processes. The use of study groups is fundamental to the adult learning model utilized by Adult and Professional Studies. Indiana Wesleyan University feels the use of study groups "contributes to the ability to present our courses in a compressed format. Not only is learning enhanced through this method, but students also have the opportunity to hone their teamwork skill" (Indiana Wesleyan University [IWU], 1997, p. 17).

Typically, courses require 6-10 weeks of one, 4-hour evening class per week. The average course is six weeks long or 24 contact hours of instruction. Since more traditional semester courses are 40+ hours of actual contact time in the classroom, the additional hours are made up through a combination of ways. The curriculum has been designed in an intensive format requiring considerable self-directed learning as well as group interactive learning. These two methods assure that students receive the equivalent instruction that the 40-hour semester courses offer. The program is "lockstep" in the sense that the courses are prescheduled for the entire duration of a student's enrollment.

Students know from the initial registration for the program what the sequence of the courses will be, when breaks will occur, and even are told who their instructors (facilitators) will be. Given this format, the 41-credit-hour Master of Business Administration degree can be completed in just over 2 years of study.

In the fall of 1998, Indiana Wesleyan University added another Master of Business Administration degree offered on-line. The program mirrors the in-class degree, except all courses are conducted via the Internet. The flexibility of this program allows students from literally all over the world to attain an advanced degree, albeit from the comfort of their own home. This new program is fully accredited by the North Central Association of Colleges and Schools (NCA).

The Master of Science in Management (MSM) Degree program is designed in the same format as the Master of Business Administration. It, however, is Human Relations oriented in its coursework as opposed to the more quantitative courses found in the MBA program, such as Economics, Statistics, Accounting, and Finance. Given its intense format and fewer credit hours required than the MBA, the MSM can be completed in just less than 1 1/2 years.

The baccalaureate programs are degree-completion programs. The two programs under study in this research require a minimum of the equivalent of 2 years of previous college credit. Like the two graduate degrees, the programs are lockstep in their design, include intensive instructional formats and the use of study groups, and can be completed in less than 2 years (Bachelor of Science in Management—19 months, and Bachelor of Science in Business Administration—18 months). The undergraduate programs do have

some flexibility built into them; in that depending on a student's prior college preparation, elective courses may be required.

Added to the existing Adult and Professional Studies curriculum in 1991, the Associate of Science in Business (ASB) degree is a two year program designed either to be a terminal degree in general business, or to provide a foundation for the completion of a baccalaureate degree in a business-related field. The format of the ASB degree is the same as the other Adult and Professional Studies programs and can be completed in 24 months.

Recently, two additional bachelor-degree completion programs were added to the Adult and Professional Studies programs. In 1997, the Bachelor of Science in Business Information Systems was added, and in 1998, the Bachelor of Science in Accounting was added. Both of these degrees can be completed in approximately 18-24 months.

Generally, all university curriculums are developed around major content areas.

Related topics are often collected and departmentalized. Majors are offered within these departments. Generally, a student "majors" when there is completion of a collection of courses which gives them some level of depth in a particular area of focus. Indiana Wesleyan develops its coursework much like other schools. Courses are content-specific and related to certain major fields. However, because the world changes so rapidly and new knowledge and technology are being produced at alarming rates; Indiana Wesleyan University has felt the need to concentrate not only on specific subjects, but on key lifeskills as well. In this day of information technology, Indiana Wesleyan University has chosen 10 such skills as keys to a graduate's success. Each course within the Adult and Professional Studies curricula has been developed with these 10 life-skills in mind. Out-

of-class assignments and in-class discussions have been designed to foster more than an understanding of a particular content area, such as management, finance or accounting.

Instead, Adult and Professional Studies courses have been designed to not only include the content areas, but for students to work on and show personal development and progress in these life-skills.

Indiana Wesleyan University has forged goals in its curriculum development, which revolve around these 10 skills. These goals, which are interrelated across the entire curriculum, have been labeled the Ten Across (Iddings, 1995, p. 5). It is expected that students, during their enrollment in an Adult and Professional Studies program, make significant personal as well as professional progress in these areas over time. These Ten Across skills include:

- 1. The ability to see things from the perspective of a Christian worldview.

 Students are expected to:
 - a. Know how a view of the world with Christ at the center differs from a secular, post-modern or humanistic view
 - b. Know the basics of a broadly Christian perspective on the nature of the world
 - c. Be able to articulate implications of that view in interpretation and action
- 2. Skill in ethical thought and action. Students are expected to have developed the following characteristics:
 - a. A personal awareness of their present values
 - b. Openness to the values of others and a willingness to adjust convictions if warranted

- c. A well-developed framework of ethical principles
- d. Ability to evaluate decision-making situations in terms of relevant personal values
- e. The courage to act in consonance with the principles to which they are committed
- 3. Values and skills necessary for lifelong learning. Students should evidence the following:
 - a. Curiosity and the desire for more knowledge
 - b. Openness to new ideas
 - c. Awareness that every new situation is an opportunity for learning
 - d. Broad repertoire of learning strategies
 - e. Confidence and motivation while persevering through a learning task
 - f. Ability and willingness to compensate for learning skill deficiencies
- 4. The ability to read complex materials with comprehension. The knowledge, skills, and attitudes to read well include the following:
 - a. The willingness to actively read, exerting effort
 - b. Skill in scanning for the structure of a written work
 - c. An ever-increasing vocabulary
 - d. Ability to raise questions about all levels of a work
 - e. The propensity to relate the topics being discussed to past knowledge, experience, and life circumstances
- 5. Skill in thinking critically concerning ideas and performance (i.e., reflective practice). Students should show evidence by the ability to:

- a. Identify purposes or goals
- b. Define the question at issue or the problem to be solved
- c. Look at issues from different points of view or frames of reference
- d. Evaluate data and evidence
- e. Reflect on the relative merit of the concepts in use
- f. Show mastery of the details of logic and deductive reasoning
- g. Identify and critique assumptions
- h. Think through the implications and consequences of a particular line of reasoning
- 6. Skill in problem solving and making decisions. Students should show evidence by the ability to:
 - a. Isolate key issues in a problem decision and prioritize their importance
 - b. Draw on emotions, intuition, logic, and experience in solving problems
 - c. Collect relevant data
 - d. Ask questions of the data at hand and to look for hidden assumptions
 - e. Integrate ethical perspectives with the decision-making process
 - f. Adopt multiple perspectives
 - g. Carefully analyze proposed solutions and to choose those which maximize benefit while minimizing risk
 - h. Make timely decisions
- 7. The ability to communicate effectively through writing. This should be characterized by the following:
 - a. The ability to distinguish between good writing and poor writing

- b. Recognition of the interrelationship of message, audience, and purpose in writing
 - c. Competence in crafting well-turned phrases and sentences
 - d. Skill in re-writing and editing
 - e. Skill in the mechanics of writing
 - f. Understand the proper forms of documentation
- 8. The ability to communicate effectively orally. The characteristics of a good speaker includes:
 - a. Ability to develop and organize a presentation appropriate to the context
 - b. Skill in listening, reading body language and discerning other feedback
 - c. Ability to deliver an oral presentation using good vocal qualities, appropriate body language, and good eye contact
 - d. Persistence in preparation and practice prior to the presentation
 - e. Ability to effectively use various media in a presentation
- 9. The ability to find needed information (information literacy). This should be characterized by the following:
 - a. Awareness of the wide variety of available sources of information
 - b. Willingness to seek needed information
 - c. Skill in locating relevant information
 - d. Ability to evaluate information as to its usefulness and to discriminate between important and unimportant data
 - e. Ability to evaluate information as to its accuracy
 - f. Ability in searching databases

- 10. The ability to work effectively in teams. This should be characterized by the following:
 - a. Able to take responsibility for the success of an entire team
 - b. Ability to hold personal and group accountability for mutually agreed upon goals
 - c. Ability to negotiate goals and ideas in a team setting
 - d. Listening skills
 - e. Skill in building on the ideas of others in a creative fashion
 - f. Ability to give constructive feedback.

Statement of the Problem

It is the Ten Across key life-skills that form the foundation for this study. Indiana Wesleyan University has conducted attitudinal surveys of its graduates in the past, but never specifically related to the Ten Across. Graduate surveys typically relate to what salaries graduates are making or what vocational positions the graduates have secured. Since Indiana Wesleyan University places such a high amount of emphasis on these key life-skills, it is important that its graduates be surveyed to determine their perceptions as to their relative progress in each of the 10 areas. Indiana Wesleyan University needs to find out how graduates feel about the importance of these 10 skills, but more importantly, the level or amount of progress graduates feel they made in each of the skill areas during their tenure as Indiana Wesleyan University students.

Purpose of the Study

The overall purpose of this study is to determine the perceived attitudes of Adult and Professional Studies Business and Management graduates regarding the importance of and their progress in the Ten Across areas. The intention of the study is to find how important is it that Indiana Wesleyan University develop these qualities in its graduates, based on its graduates' perceptions, and also to show what level of progress graduates felt they had made in each of the skill areas. The study specifically focused on Business and Management graduates and did not deal with other Adult and Professional Studies programs such as Education or Nursing. The Nursing and Education programs have recently been reaccredited by their respective governing bodies, and graduates of those programs were surveyed for these accreditation visits. Because there has never been an extensive survey completed by Business and Management graduates, it was decided that this study was necessary.

Theoretical Basis for Study

Students in the Indiana Wesleyan's Adult and Professional Studies (APS) programs are working adults and bring significant skills and work experiences to the classroom from which to draw from. Indiana Wesleyan has purposely formatted its curriculum to be accelerated, emphasizing interaction among participants. As mentioned previously, the curriculum has been designed in an intensive format requiring considerable self-directed learning as well as group interactive learning. Bartz and Calabrese (1991) found that "cohort groups provide a vehicle for students to interact about content, study together, work on common problems, and assist each other with difficulties. They also

serve members by acting as a support system" (p. 149). In her study of group learning, Imel (1999) found that "group learning appears to motivate participants to become actively involved and engaged in the learning process" (p. 58). The use of study or cohort groups (teams) plays an important role in the learning process and Indiana Wesleyan University's business and management programs all rely heavily on the cohort model.

Galbo (1998) discussed a number of components of adult learning theory as those most critical to the effective development of adult education programs. These components included:

- 1. Adults need real-world application.
- 2. Adults want to be treated as competent adults.
- 3. Adult learning involves egos.
- 4. Adults need constructive feedback to learn and apply new skills.
- 5. Adults benefit from small-group activities.
- 6. Adult learners have a wide range of skills and experiences.
- 7. The transfer of learning must be facilitated (p. 14).

Merriam (2001) examined the concepts of adult and self-directed learning. She noted that adult learners:

- 1. Tend to be independent and can direct their own learning.
- 2. Have life experiences that are brought to the classroom.
- 3. Are problem-centered and are interested in immediate application.
- 4. Are intrinsically motivated (p. 5).

These types of principles of adult education have been incorporated into the development of the APS programs. Much like the principles articulated above, the following are the foundational, adult education elements that make-up APS programs:

- 1. Adult students are motivated to learn.
- 2. Adults have learned discipline.
- 3. Adults have broad life experiences.
- 4. Adults desire relevance.
- 5. Adults have developed skills in independent learning.
- 6. Adults learn best when they are personally involved.
- 7. Adults have many insights of their own.
- 8. Adults can direct their learning to fill in gaps in their knowledge.
- 9. Adults learn well in groups (IWU, 1997, pp. 7-8).

These foundational elements are inherent to the principles of adult education. A number of authors have written about and espoused these principles in the development of curriculum for working adults. Knowles (1990), the Zemkes (Jones, 1982), Galbo (1998), and Merriam (2001) found that adult education principles revolve around such concepts as students experience instruction that is problem centered and self-directed and the application of instruction in the workplace. The principles that shape the theory of adult education form the basis for this study, and the results will show whether Indiana Wesleyan's Adult and Professional Studies programs are adequately designed to model these principles and this theory.

Research Questions to Be Answered, Hypotheses to Be Examined

There are four major research questions, which will be addressed in this study.

The first of these questions is:

1. To what degree do Indiana Wesleyan University Business and Management graduates perceive the Ten Across skills as important?

The second research question under consideration in this study is:

2. What differences in perceived importance of the Ten Across skills are there among Indiana Wesleyan University Business and Management graduates based on academic major and gender?

In developing appropriate hypothesis statements related to this question, there exist two independent variables: academic major and gender. The dependent variable is the degree of perceived importance of the Ten Across skill areas. To address this research question, the following three hypotheses were tested:

Hypothesis 1: There is a difference in the perceived importance of the Ten Across skills based on academic major.

Hypothesis 2: There is a difference in the perceived importance of the Ten Across skills based on gender.

Hypothesis 3: There is a positive interaction between academic major and gender in the perceived importance of the Ten Across skills.

The third major research question in this study is:

3. To what degree do Indiana Wesleyan University Business and Management graduates perceive that they have shown progress in each of the Ten Across skills?

The fourth major research question in this study is:

4. What differences in perceived progress in the Ten Across skills are there among Indiana Wesleyan University Business and Management graduates based on academic major and gender?

In developing appropriate hypothesis statements related to this question, there exist two independent variables: academic major and gender. The dependent variable is the degree of perceived importance of the Ten Across skill areas. To address this research question, the following three hypotheses were tested:

Hypothesis 4: There is a difference in the perceived progress in the Ten Across skills based on academic major.

Hypothesis 5: There is a difference in the perceived progress in the Ten Across skills based on gender.

Hypothesis 6: There is a positive interaction between academic major and gender in the perceived progress in the Ten Across skills.

Through a stratified random sampling of Business and Management graduates, the results of this study will provide answers to these four research questions.

Importance/Significance of the Study

The relevance of alumni research to administrative decision making has been recognized for some time (Delaney, 1995, p. 4). Alumni research "has assumed increasing importance for its potential contribution to outcomes assessment" (Pike, 1990, p. 3). Alumni surveys have been found to "provide a basis for evaluating how well the knowledge and skills developed through the educational program relate to the knowledge and skills required in the workplace" (Jennings, 1989, p. 440). Williford and Moden

(1989) observed that a unique feature of alumni surveys, as compared to enrolled students, is the capability of "documenting students' assessment of the quality of their educational experience" (p. 6). Martin et al. (2000) found that "graduate feedback is pivotal. . . .It is important to have satisfied alumni because through word of mouth they can increase undergraduate numbers which in turn increases financial assistance" (p. 200). Ogletree used an alumni survey to assess the Psychology Department at Southwest Texas State University. She recommends the use of surveys because schools need to "be response to alumni's feedback" (p. 218). The use of alumni surveys is such a functional part of an assessment effort that some states are even requiring them (Astin, 1991).

When this study was first suggested to Adult and Professional Studies administration, Dr. David Wright, then Vice President and Dean of Adult and Professional Studies, felt the outcome of the study would place Indiana Wesleyan University into a "win-win" situation. He said, "If we find that we are doing a good job, and receive positive results, we win. If, on the other hand, there are areas that we need to work on based on the survey, we also win because we have time to make changes" (personal communication, April 17, 1997).

The North Central Association of Colleges and Schools (NCA) accredits Indiana Wesleyan University's Adult and Professional Studies degree programs. In February of 1998 NCA conducted a focused site visit. The purpose of this focused evaluation was to review a request for the approval of the newly redesigned Master of Business Administration program to be offered in an on-line format. One of the areas that the evaluation team specifically mentioned as needing improvement was the assessment of student achievement. They felt that "progress in implementing the plan for the assessment

of student academic achievement within the Adult and Professional Studies Division is a concern" (Grossman & Trussell, 1998, p. 9). Furthermore, the use of alumni surveys is an acknowledged assessment method that the North Central Association of Colleges and Schools recommends and encourages.

The results of this study are important, especially in the future development of curriculum. If a particular course is found to be weak (in other words, the graduates felt they experienced little or no progress), through the curriculum development process, courses can be redesigned to emphasize that specific area of perceived weakness. If, for example, oral communication skills (#8 of the Ten Across) is an area that graduates identify as having shown little or no progress, then future courses can be redesigned to emphasize or bolster this skill with exercises, tests, demonstrations, etc.

There have been many criticisms of U.S. business management education. Merritt (2001) found that "companies have begun complaining that MBAs, while well-informed, often lack the experience and judgment in an unpredictable environment (p. 66).

Eberhardt and Moser (1997) noted "an apparent gap between the skills and abilities of business graduates and the needs of U.S. businesses" (p. 293). They felt that business curriculum "is not developing the 'soft skills' of managers successfully" (p. 293).

Furthermore, Brody and Coulter (2002) found that "skills once deemed to be appropriate and necessary for graduates may no longer be applicable or effective in preparing them for today's challenges" (p. 222). Criticism has focused on, among other issues, "curriculum inadequacy" (Petrick, Polak, Scherer, & Munoz, 2001, p. 3). Addressing curriculum inadequacies is a prominent point to this research.

General Methodology

The general methodology of this study was the development of a survey instrument that was sent to a sample of Business and Management graduates. To increase the response rate, the instrument was purposely simple in construction and format. A stratified random sample was conducted of those Adult and Professional Studies Business and Management, Bachelor and Graduate level alumni who graduated from 1996 through 1998.

Furthermore, based on basic demographic issues, statistical analysis was conducted to determine:

- 1. Similarities/differences between majors (degree programs)
- 2. Similarities/differences between gender
- 3. Interactions between majors and gender

By using the basic demographic qualifiers, it was determined if a particular life-skill is strong or weak (based on graduates' perceptions) in an undergraduate or graduate major (program), and if there were similarities/differences in gender responses. Based on the analysis of the data, recommendations will be made in content areas that are found to be weak (in other words areas that graduates felt they experienced little or no progress).

Delimitations of Study

The following delimitations apply to this study:

- 1. Only Business and Management graduates were surveyed.
- 2. Only Bachelor's level and Master's level graduates were surveyed.
- 3. Only graduates from 1996 to 1998 were surveyed (the Ten Across skills were

not added to the curriculum until 1995).

- 4. The survey addressed only the Ten Across life-skills.
- The survey addressed only the relative importance of and progress made in the
 Ten Across skills based on graduates' perceptions.

Summary

The Indiana Wesleyan University Division of Adult and Professional Studies was created to provide post-secondary Christian liberal arts education accessible to working adults. As part of the Adult and Professional Studies mission, this education has been characterized by "academic excellence" (IWU, 1997, p. 5). In order to be successful today, Indiana Wesleyan University has identified 10 life-skills upon which it develops its curriculum. To maintain overall quality and this aforementioned "academic excellence," efforts are in place to monitor the quality of instruction in the classroom. By conducting an attitudinal survey of graduates, it was determined that feedback could be gained to further enhance these in-place quality efforts. Furthermore, in preparation for future North Central Association of Colleges and Schools accreditation visits, the feedback from this study can provide relevant information needed to make curriculum changes in advance of the next North Central Association of Colleges and Schools site visit.

Outline of the Remainder of the Dissertation

In chapter 2, Review of Related Literature, the initial portion examines the theoretical construct of adult education. Next, various research studies are examined to establish the need for required skills for graduates of business and management programs. Additionally, this chapter will show the relevance of and significance for conducting

attitudinal surveys of graduates from a business and management program as well as a variety of other academic backgrounds. Most of the studies examined relate to perceptions and/or attitudes of graduates of their respective college or university's academic programs.

Chapter 3, Methodology, describes the population surveyed, discusses the instrument design including details of validity and reliability, outlines pilot studies, and examines procedures for data collection and analysis.

Chapter 4, Results, presents a descriptive statistical analysis of the results of the survey research, demographic issues, research questions, as well as qualitative comments.

Finally, Chapter 5, Summary, Conclusions, and Recommendations, presents a series of recommendations based on the analysis of the research data.

CHAPTER II

LITERATURE REVIEW

The overall purpose of this study was to determine the perceived attitudes of Adult and Professional Studies Business and Management graduates regarding the importance of and their progress in the Ten Across areas. The intention of the study was to determine how important it is that Indiana Wesleyan University develop these qualities in its graduates, based on its graduates' perceptions, and also to show what level of progress graduates made in each of the skill areas.

This chapter is segmented into four general areas. First, the concept of Andragogy, "the art and science of helping adults learn" (Craig, 1990, p. 121) is discussed. Since Indiana Wesleyan University's adult programs are designed using adult learning theory, the theoretical constructs of adult education principles are examined. All of the Indiana Wesleyan University Adult and Professional Studies programs are founded on adult education principles, and courses are "facilitated" as opposed to "taught."

Therefore, this first section of the literature review is included to substantiate the rationale for the design of Adult and Professional Studies programs. Next, previous research is examined relating to requisite skills for graduates of business and management programs. There exists a body of research that recommends specific skills to be taught in business degree programs. It is the linking of the skills to the Ten Across that forms the foundation

of this research. The third area of this chapter discusses the body of literature specifically covering perceptions/attitudes of graduates of business and management degree programs from other colleges and universities. There has been significant research undertaken that has examined business school graduates' perceptions of the quality of their education. Finally, similar studies of varying academic disciplines will be examined. Various other "majors" are analyzed to further support this research.

Theoretical Constructs of Adult Learning

Initially, formal educational institutions in modern society were established for the education of children. At the time of their establishment, there existed a model about learners and learning—the pedagogical model (derived from the Greek words *paid*, meaning child, and *agogus*, meaning leader). *Pedagogy* means literally "the art and science of teaching children" (Kelly, 1995, p. 212).

The pedagogical model assigned full responsibility to the teacher for making all decisions about what should be learned, how it should be learned, when it should be learned, and even if it should be learned. This model assumed that students were submissive recipients of learning, were dependent, and had little experience that could serve as a resource for learning. It also assumed that students were subject-centered and were extrinsically motivated to learn.

When adult education became organized in the early part of the last century, pedagogy was the only teaching model that existed, and therefore, adults were taught as if they were children. As far back as the mid-1920's, Edward Lindeman in his *The Meaning* of Adult Education proposed that "adults were not just grown-up children, that they

learned best when they were actively involved in determining what, how, and when they learned" (Kelly, 1995, p. 213).

It was not until the 1960s that adult educators felt a need for a more appropriate label for the growing body of knowledge about adult learning. Malcolm Knowles has generally been given the credit as being the "father" of the concept of andragogy in the United States. Originally discovered by a German adult educator in 1833, andragogy was derived from the Greek word aner, meaning adult. In his 1970 work, The Modern Practice of Adult Education: Andragogy Versus Pedagogy, Knowles reiterated the concept of andragogy—"the art and science of helping adults learn" (Craig, 1990, p. 121).

There exists distinct differences in the way children and adults learn and how they should be taught. Knowles espoused four assumptions that differentiate the concept of andragogy from pedagogy:

Assumption 1: Changes in Self-concept. This assumption is that as a person grows and matures his or her self-concept moves from total dependence (as in childhood) to one of increasing self-directedness.

Assumption 2: The Role of Experience. This assumption suggests that as a person matures, he/she continuously accumulates an expanding reservoir of experiences that causes him/her to become an increasingly rich resource for learning, which at the same time provides a broadening base to which this new learning can be related.

Assumption 3: Readiness to Learn. As a person matures, this readiness to learn is decreasingly a product of their biological development, but rather is increasingly the product of the developmental tasks required for personal performance.

Assumption 4: Orientation to Learning. This assumption suggests that adults have a problem-centered orientation to learning with a time perspective that requires the learning of today to be put in place and used tomorrow (Craig, 1990, p. 122).

As the following will show, there has been significant research that has lead to other assumptions about adults as learners:

- 1. Adults have a need to know why they should learn something. Allen Tough found that adults "expend considerable time and energy exploring what the benefits would be of their learning something and what the costs would be of their not learning before they would be willing to invest time and energy learning it" (Craig, 1990, p. 214). What this means is that one of the first tasks of adult educators is to develop a "need to know" in learners—to make a case for the value in a learner's life experience of the learning. When learners are committed, out of their own choice, to learning what needs to be learned, the learning process will be more effective.
- 2. Adults have a deep need to be self-directed. While there is a continuing discussion among researchers about the nature of self-directed learning, Craig (1990) points out that it is clear that "adults do not just depend on institutions as sources of learning" (p. 116). He felt that it is critical for educators to remember that "learning does not just take place in the classroom rather, the evidence is clear that more adults will take responsibility for some form of their learning" (p. 117).
- 3. Adults have a greater volume and quality of experience than youth. Adults bring to a learning situation a background of experience. In adult education, the greater emphasis needs to be on the use of experiential learning techniques such as problem-

solving, discussions, and experiential exercises that tap into this accumulated knowledge and skills of adult learners (Craig, 1990, p. 112).

- 4. Adults are problem-centered. As mentioned earlier, children have a subject-centered orientation to learning they see learning as a process of acquiring the subject matter necessary to pass tests. In adult education, the acquisition of a new skill or utilization of new technology is preeminent. Adults are motivated by the desire to deal with a new problem or deal with an old problem in a better way. In adult education, it is therefore critical to help adults make a "tight connection between what they are learning and the improvements in problem-solving that will result from applying their new skills" (Kelly, 1995, p. 222).
- 5. Adults are motivated to learn both extrinsically and intrinsically. The pedagogical model assumes that children are motivated extrinsically--pressure from parents and teachers, competition for grades, and diplomas. Adult learners are also motivated by extrinsic rewards--wages, raises, and promotions, but only to a certain point. However, it has been found that "the more potent and persistent motivators are such intrinsic motivators as the need for self-esteem, broadened responsibilities, power, and achievement, etc." (Kelly, 1995, p. 223).

Although best known for their work in the field of adult training and development, Zemke and Zemke (Jones, 1982) have articulated a somewhat comprehensive list of truisms about adult learning which can be applied to education as well. They identified numerous points that they segmented into three basic divisions: adult learning and motivation, curriculum design, and working with adults in the classroom. Below is a

sampling of some of their findings. The issues identified here are those that have the most direct relevance to adult higher education and learning.

- Adults cannot be forced to learn--they cannot be threatened, coerced, or tricked. Birch rods and gold stars have little impact.
- 2. For most adults, learning is not its own reward. Adults seek out a learning experience (80-90% of the time) because they have a use for the knowledge or skill being taught. Often their need is job advancement.
- 3. Increasing or maintaining a person's sense of self-esteem is a strong secondary motivator for engaging in a learning experience.
- 4. Adult learners tend to be the least interested in "survey" courses. Instead, they prefer courses that focus heavily on concept application to problem-solving situations.
 - 5. Adults need to be able to integrate new ideas with what they already know.
 - 6. Adults prefer self-directed learning.
- 7. Adults (as many as 80%) feel the application of information is the primary motivation for undertaking a learning project.
- 8. Self-direction does not mean isolation projects should include other people as resources, guides, and encouragers.
 - 9. Adults should have a hand in shaping program curriculum.
- 10. Long lectures, long periods of sitting, and the absence of opportunities to practice the theory being taught irritate adults.
- 11. It is critical for adult educators to take the time to clarify and articulate course expectations.

- 12. Adults bring a wealth of life experience to the classroom. Educators need to tap into and use this asset as adults can learn well, and much, from their peers.
- 13. New knowledge needs to be integrated with previously learned knowledge, which requires active learner participation.
- 14. The transfer and integration of new knowledge and skills requires transition time and effort. Working on the application to on-the-job problems facilitates the transfer of learning.
- 15. Adults want their learning to be problem-centered and self-directed (Jones, 1982, pp. 115-117).

As compared to "younger" people, those in their 30's and beyond possess a number of qualities that affect the learning process. Davies (1981) found that these "older" people are:

- 1. More easily discouraged
- 2. More anxious, tense, and lacking in confidence
- 3. More fearful of failure
- 4. More resistant to change and innovation
- 5. More careful
- 6. More troubled with problems of unlearning (p. 297).

These characteristics of "older" learners are significant to adult educators. Success in teaching adults depends on motivation and preparation. Davies (1981) suggested that some changes need to be made in instructional methodology relating to four factors: organizational, instructional, learning, and personal.

1. Organizational factors:

- a. Periods of instruction should be 60-90 minutes in duration.
- b. Instruction should be purposeful and job-related.
- c. Experiences brought to the classroom need to be respected.
- d. Strong emotional support and encouragement need to be given.

2. Instructional factors:

- a. Discovery methods of learning should be used.
- Formal tests and examinations should be avoided--continuous assessment should be used.
 - c. A variety of instructional methods and work assignments should be used.

3. Learning factors:

- a. The need for memorization should be reduced.
- b. Practice needs to be employed.
- c. The meaningfulness and relevance of material need to be ensured.

4. Personal factors:

- a. Learners should be allowed to participate in the planning process.
- b. Learners need to feel a sense of achievement and recognition.
- c. Group feelings and identity should be promoted (p. 298).

More recently, research has been undertaken to determine how adults learn. Galbo (1998) found that a number of components of adult learning theory are critical to the development of learning experiences for adults. Among these components are:

- 1. Adults need real-world applications.
- 2. Adults want to be treated as competent professionals.
- 3. Adult learning involves egos.

- 4. Adults need constructive feedback on their efforts to learn.
- 5. Adults benefit from small-group activities.
- 6. Adults bring a wide range of skills and experiences to the classroom.
- 7. The transfer of learning must be facilitated (p. 14).

Furthermore, Merriam (2001) examined the concepts of adult and self-directed learning. She noted that adult learners:

- 1. Tend to be independent and can direct their own learning.
- 2. Have life experiences that are brought to the classroom.
- 3. Are problem-centered and are interested in immediate application.
- 4. Are intrinsically motivated (p. 5).

This foundational section is needed in the Literature Review as the Adult and Professional Studies programs at Indiana Wesleyan University serve a non-traditional student population. As was found by Knowles (1990), the Zemkes (Jones, 1982), Galbo (1998), and Merriam (2001), adult education principles revolve around such concepts as the students' experience, instruction that is problem centered and self-directed, and the application of instruction in the workplace. These concepts are foundational to all Adult and Professional Studies curriculum and are overtly considered when instructing in the classroom. Because most of Indiana Wesleyan University's students are working adults, the above assumptions, issues, and factors directly relate to the problems of curriculum design, delivery methodology, and program effectiveness within the Adult and Professional Studies Business and Management programs.

Requisite Skills for Business and Management School Graduates

In the early 80s, a survey of officers of large American companies illustrated the rankings of managerial traits commonly found in such companies. Drawing from a list of 32 traits, the officers were asked to identify the 5 that "become more important to success as a college graduate employee progresses to middle or top positions in your company" (Warren, 1983, p. 11). The 8 traits named most frequently include (identified in descending order of frequency):

- 1. verbal communication skills
- 2. ability to identify and formulate problems
- 3. willingness to assume responsibility
- 4. interpersonal skills
- 5. reasoning ability
- 6. creativity
- 7. writing skills
- 8. ability to function independently.

It is interesting to note that communications, decision making, and interpersonal abilities lead the list, as opposed to technical abilities. Bisconti and Kessler (1980) found in their research that business school graduates reported that, as their careers evolved, they relied less on specific technical training, but more on their management and communication abilities.

Communication and decision making have been found to be central to a manager's job, and should not be "relegated, as they often are in Master of Business Administration

programs, to tangential, not for credit 'communication skills' clinics' (Johnston et al., 1986, p. 157).

Probably the most consummate work on requisite skills for business and management school graduates was that of Porter and McKibbon (1988). The focus of their research covered a number of areas, but the most relevant to this Indiana Wesleyan University study dealt with curriculum. Typically, business schools are expected to develop curriculum around what is often called the "common body of knowledge." This "body" covers five major functional areas, including: (1) production, marketing, and finances; (2) economics, legal, and ethics; (3) accounting, quantitative methods, and information systems; (4) organizational theory, behavior, and interpersonal communications; and (5) administrative processes, analysis, and policy (Porter & McKibbon, 1988, p. 59). Courses in most business programs are developed using this "common body" as a guide. Indiana Wesleyan University's Business and Management degree programs include courses which cover the "common body of knowledge."

The Porter and McKibbon study (1988) found that "the curriculum should emphasize the development of various skills and personal characteristics" (p. 71). Their research identified nine particular skills and personal characteristics, which included:

- 1. Analytical
- 2. Computer
- 3. Decision Making
- 4. Initiative
- 5. Leadership/interpersonal skills
- 6. Oral communications

- 7. Planning/organizing
- 8. Risk taking
- 9. Written communications.

Based on various studies carried out in the early 1980s, there was indicated a "widespread perception in the practicing world of business that business school graduates were insufficient in communication skills--both oral and, especially written (Porter & McKibbon, 1988, p. 99).

To address these perceived inadequacies, in their research, they asked deans, faculty, and students how each of the nine skills and personal characteristics were currently emphasized in the curriculum and how each should be emphasized. In every one of the nine skills and personal characteristic areas, the skills were not perceived as being emphasized as much as they should be (p. 72). The authors discovered that "most deans and faculty think that communication is still not sufficiently emphasized in the curriculum" (p. 85). They felt the "major weakness of baccalaureate graduates from business schools center around communication. Deans and faculty members agreed that written and oral communication skills ranked as the number 1 and number 2 deficiencies of business undergraduates" (p. 103). Furthermore, deans and faculty both felt that "the communication area—both written and oral—was, relatively speaking, the area of greatest weakness in their MBA students" (p. 112).

Porter and McKibbon (1988) did not recommend sweeping curriculum changes.

They found "no forceful push for systematic curriculum change" (p. 80). They did suggest, however, that the designers of curriculum must "be highly tuned in to the need to sense relevant current basic changes in the environment" and "that over time a curriculum

needs to have enough flexibility built in such that innovation and adaptability to changing conditions can be nourished and encouraged" (p. 80).

The Porter and McKibbon (1988) research is notably significant to this Indiana Wesleyan University study. Their list of nine skills and personal characteristics compare very favorably to Indiana Wesleyan University's "Ten Across." As was mentioned in the above-cited studies, business school graduates are expected to develop or progress in a variety of skills. Many of the aforementioned skills are similar to Indiana Wesleyan University's Ten Across skills. In particular, I wanted to find out whether oral and written communication skills show the same weakness in the Indiana Wesleyan University study as they did in the Porter and McKibbon research.

Over the years, Master of Business Administration degree programs have been criticized for being too reliant on quantitative skills, at the expense of communications, interpersonal, and decision-making skills. One personnel instructor complained that business schools "concentrate on teaching people to count, rather than teaching that people count" (Georgeson, 1982, p. 11).

In general, MBA programs have fallen under severe criticism for "having lost touch with corporate America" (Cudd and King, 1995, p. 44). They found that many business schools restructured to address more "soft" skill courses (qualitative) versus "hard" (quantitative) courses. Much of the criticisms of MBA programs focus on what they found were a "lack of nontraditional skills training" (p. 45). The Cudd and King research found that business schools were shifting toward a greater emphasis on these "soft" skills as opposed to the "hard" skills. This shift toward the greater emphasis on soft

skills is "consistent with the importance of increasing the nontraditional skills of MBAs" (p. 45).

Cudd and King (1995) surveyed business schools to determine what type of restructuring was taking place. Their survey results indicated that many schools were offering new courses that better reflected the current day business environment. What they found is that these schools were including new nontraditional courses in communications and teamwork. The additions of this nontraditional coursework appeared to be in direct response to employer complaints that "MBAs are lacking in creativity and interpersonal, teamwork, and communication skills" (p. 47).

Another study that examined criticisms of MBA programs was undertaken recently by Richards-Wilson (2002). She too felt that MBA programs "were not adequately preparing students for the real world" (p. 296). Older MBA programs tended to provide technical training but lacked social skills. The newer programs emphasize interpersonal skills and teambuilding. She found that "part-time graduate business students today principally seek two accommodations: program flexibility and convenience" and to keep pace with the changes in society in general, business programs "must innovate to attract good students" (p. 299).

In recent years, calls have been made for graduates of business schools to be more proficient in communications skills so that they can function effectively in the workplace. Crosling and Ward (2002) found that "oral communication is seen by employers as vital, but, interestingly, is an area for which graduates lack preparation (p. 42). They developed a questionnaire to establish the nature of workplace communication for graduates of a

university business program. Their major findings were that "oral communication pervades the workplace" (p. 46).

Cyphert (2002) examined ways to integrate communications courses into MBA curriculum. He felt that this challenge in integration is especially important in "accelerated programs" (p. 81). Since many graduate students in evening MBA programs attend classes on a part-time basis, and are often from technical professions, "many lack managerial level communication skills" (p. 82).

Cyphert (2002) recommended that his university develop a plan that integrates communication skills across their entire curriculum. He found that the focus of communications skill development had shifted to the "additional integration of communication instruction, coaching, and feedback within all courses in the MBA program" (p. 85).

In another recent study, Ulinski and O'Callaghan (2002) found that "employers want new employees that can effectively communicate" (p. 193). Like the other studies noted above, critics of MBA programs felt that "there should be a broader approach to MBA education, with more focus on qualitative skills" (p. 194).

Eberhardt and Moser (1997), in their research, found that certain skills are critical for MBA graduates. The most important factors were "oral and written communication" (p. 295). They recommended that business schools need to "adjust their curricula to satisfy the shortcomings perceived by practicing managers" (p. 296).

Finally, it was noted by Peggy Klaus (2001), a communication and leadership consultant, that some MBA graduates "are severely lacking when it comes to the all-

important interpersonal and process skills critical for achieving success in the business world" (p. 6).

A number of studies were examined that related to the surveying of graduates of business and management programs as well as other academic disciplines. Each is identified below and includes details about their respective methodological approaches. The reason these methodologies are included in such detail is to substantiate the use methodological approach used in this Indiana Wesleyan University study which is explained in chapter 3.

Graduate Surveys of Business and Management Programs Annis and Rice's Study

Annis and Rice (1992) surveyed the graduates of an economics and business department of a medium-sized Christian liberal arts college. Their purpose in conducting the survey was to perform a S.W.O.T. analysis, in other words "assess the strength, weaknesses, opportunities, and threats of the department" and "help plan for the future" (p. 2). A Business Advisory Council made up of business men and women had been formed to help the department in its planning, and it was they who felt that a study was needed to assess the department's image and effectiveness.

The department had previously established internal goals for its majors in its mission statement. With the assistance of the Business Advisory Council, certain goals were determined to be the most important to evaluate, and a questionnaire was developed to test how well department graduates perceived that the department was reaching these

goals. The questionnaire was designed to discover whether graduates felt the department and the school "had prepared the graduates" (p. 4).

The department determined that there existed 34 qualities which were directly related to the departmental objectives and which were grouped into categories of skills, values, and knowledge. Included in the skill category were such requisite skills as information technology, interpersonal communication, public speaking, analysis and decision-making, project planning, moral sensitivity, problem-solving skills, ability to work as a team member, insight into Christian leadership styles, and handling multiple tasks. These skills were deemed as important for the department graduates to have upon graduation.

The questionnaire was designed to ask how important it was that the department develops these qualities in its graduates and how well the college prepared the graduates in each area. Part I of the five-part questionnaire asked respondents about their impressions of the department. Part II, the primary evaluation tool, was designed to evaluate the preparation of graduates by the department and asked how important it was that the department develop certain qualities in its graduates. Part II also evaluated how well the college prepared the graduates in each of the areas. And finally, Part IV specifically asked for suggestions for improving the department.

Using the Alumni Relations Office as its source, a random sampling of graduates was selected as the survey population. Packets were mailed to each selected graduate that included a personalized cover letter by the department chair, a questionnaire, and a reply envelope. The surveys were confidential, but not anonymous, as each contained an identification number solely for the purpose of removing a name from the follow-up list.

A reminder postcard was sent to nonrespondents 2 weeks after the initial mailing; after an additional 2-week period, all nonrespondents were sent a second complete packet. Thank you cards were subsequently sent upon receipt of a completed questionnaire. Completed questionnaires were received from 68% of graduates.

Overall, the results showed how respondents viewed the various skills, values, and knowledge as important and also how well these prepared the graduates. Graduates saw the department as Christ-centered, theory-driven, current, rigorous, relevant, and successful.

The data from Part II were analyzed in order to examine how each of the qualities was seen as important, as well as perceived as adequately preparing the graduates. The areas that graduates perceived as important, but lacking in adequate preparation, included skills in information technology, interpersonal communication, public speaking, and analysis and decision making.

The department used the results of the study in three ways. First, it developed a strategic plan for itself. The results showed the department ways in which they could improve their education of students. Second, the Business Advisory Council was informed of the results so it could help with the department's strategic plan. Finally, the results were distributed to all department members to persuade them of the need to change. It was felt that department faculty must have ownership of any proposed changes.

The Annis and Rice (1992) study, probably more than any of the others cited, has the most direct relevance to this Indiana Wesleyan University study. It examined qualities inherent in business programs much like the Adult and Professional Studies Ten Across skills. It asked graduates how important they felt certain qualities were and also their level

of preparation within each of the areas. It showed how the academic department was able to use the results to develop a strategic plan towards improving program effectiveness. The methodology for conducting their survey also served as a model for this Indiana Wesleyan University research. But probably the most salient issue is the fact that the Annis and Rice study (1992) was conducted at a Christian institution and brought in the factor of a Christian worldview in higher education.

Ainsworth and Morley's Study

Ainsworth and Morley (1995) conducted similar research, albeit in Australia. Their survey was designed in the Total Quality Management philosophy of evaluating one's product from the quality perspective of its fitness for use by the customer. The focus of their research was to measure how well their program was succeeding or failing and for "identifying areas for improvement" (p. 176). They wanted to find out which aspects graduates of a selected Master of Business Administration program valued highly. They also hoped to determine the extent of the contribution of the MBA to career changes that followed the completion of the graduates' degree. Their study was conceived of as "a single survey to assess the current state of the course from the graduates' viewpoint" (p. 177).

The Master of Business Administration program they studied was a part-time program, which utilized study groups as a significant component of the program methodology (as does all Indiana Wesleyan University Adult and Professional Studies programs). Their MBA program was also designed to be useful and relevant and was as

much concerned with a student's ability to apply their learning as it was with an understanding of theory (again, similar to the Indiana Wesleyan University format).

Their study sought data from all 350 graduates of the part-time Master of Business Administration program. The questionnaire was accompanied by a cover letter and a reply envelope. A follow-up mailing was conducted after 2 weeks to encourage response. A total response rate of 61% was received.

The authors, through a number of iterations, developed the questionnaire until they determined a sound instrument had been designed. They felt that the good response rate and the fact that all responses received were usable were "encouraging signs of a valid questionnaire" (p. 178). Their survey questions focused on the graduates' reaction, knowledge, behavior, and outcome. Specifically, they asked questions that were designed to ascertain graduate perceptions of the program's relevance, knowledge gained, behavioral changes as a result of the Master of Business Administration experience, and the extent that the program contributed to successful work outcomes.

Eighty-five percent of the respondents felt that the program was very relevant to their career. The knowledge gained was valued highly by almost 90% of the graduates, while 73% believed that their Master of Business Administration contributed significantly to their work outcomes. Behavioral change was seen as significant or substantial by 60% of the graduates. Finally, various courses were rated as to their perceived value or importance. The use of cohort study groups was highly supported as nearly 90% of the responses were at the high end of the scale.

Among their findings was a call for more "skill" related courses, which address such issues as negotiating, interpersonal, and leadership skills. Also, the survey results

indicated a need for more use of industry experts and practitioners as course instructors.

Overall, the authors felt the results were "highly supportive of the program" and the graduates' "favorable assessment of the course is a significant endorsement of it" (p. 186).

Much like the Annis and Rice (1992) study, this research adds credence to the Indiana Wesleyan University study. As previously mentioned, Ainsworth and Morley's (1995) research was conducted on a program made up of part-time students and also utilized a study, or cohort, group format. The Adult and Professional Studies programs rely heavily on study groups to not only make up for hours lost to the intensive structural format, but also to simulate "real world" application of the theories espoused in the classrooms. Furthermore, Indiana Wesleyan University uses working professionals to facilitate its courses. This, too, is in line with the recommendations of Ainsworth and Morley.

Paranto and Champagne's Study

Paranto and Champagne (1996) also studied how well a selected university was preparing its students. Their study addressed perceptions held by the business community regarding how well a university's School of Business prepared its students as well as which criteria employers perceive to be important in hiring graduates. A secondary purpose of their study was to compare graduates of the selected university with comparable graduates of other institutions.

The authors identified nine skills that they utilized in surveying the business community. Their intention was to find out what the perceptions were in terms of preparing students with: specialized competencies, technical skills, critical thinking skills,

communication skills, mathematical skills, leadership skills, interpersonal skills, a professional attitude, and self-confidence. Their ultimate goal in conducting the study was to "determine which programs needed to be updated in the School of Business" (p. 11). They felt that "to meet the challenges of this new and changing environment, the curriculum at our nation's business schools. . . must provide a student with knowledge, skills, and abilities needed to achieve success" (p. 6). Their study was undertaken to determine what improvements needed to take place in order to make the programs more effective.

Their population consisted of 346 businesses and organizations that had recently hired business school graduates. A survey instrument was developed to measure employers' perceptions regarding the quality of education, the importance of specific workplace skills, and the comparison of graduates from other schools.

A packet was mailed which included a cover letter, the questionnaire, and a return envelope. A unique code was placed on each return envelope, for follow-up purposes only, and a follow-up survey was mailed to all nonrespondents 3 weeks later. Following the second mailing, a usable response rate of 39% was achieved.

Descriptive analyses were performed to determine respondents' perceptions regarding the school's quality of education, in terms of specific skills, as well as the level of importance of each of these skills. Analyses of variance were performed to determine the impact of respondents' demographic characteristics on their perceptions of how well prepared the graduates were for the work environment.

Employers expressed the highest level of satisfaction with business ethics in terms of skills possessed by graduates. Technical skills followed closely behind. In contrast, the

employers indicated that their lowest level of satisfaction was with written communication skills (p. 20). Interestingly, one employer rated interpersonal skills as the skill of highest importance but it was ranked third in terms of their satisfaction. Critical thinking skills received the second highest rating in terms of level of importance; however, it was ranked ninth in terms of employer satisfaction. Overall, the employers indicated they were "most satisfied with the graduates' professional attitudes, technical abilities, and interpersonal skills." Conversely, employers were "least satisfied with the written communication skills" (p. 27).

Among Paranto and Champagne's conclusions were "graduates of higher education programs are lacking in good communication skills—oral, written, and listening—which are necessary to be effective in their jobs" (p. 30). They felt that "educators should find ways to integrate communication, critical thinking, and interpersonal skills throughout the curriculum" (p. 33). Their recommendations to the school included: incorporating more collaborative learning activities, integrating writing assignments and presentations throughout the curriculum, and integrating communication and critical thinking skills in all upper-level classes (p. 34).

Paranto and Champagne's research is relevant to this Indiana Wesleyan University study because their recommendations go to the heart of the Adult and Professional Studies learning methodologies. Adult and Professional Studies programs are built on collaborative learning activities (study groups), integrate writing assignments and oral presentations in all classes, and communications and critical thinking are part of the Ten Across life-skills. What Paranto and Champagne found in their study is also foundational

to all Adult and Professional Studies programs as Indiana Wesleyan University develops its programs utilizing the results of their findings.

Geromel's Study

Geromel (1993) conducted similar research at Michigan State University (MSU). He felt that to examine the effectiveness and helpfulness of a Master of Business Administration degree, he could contact employers, ask professors and administrators their perceptions, or ask the graduates themselves. He chose the latter method of investigation as it was felt that "their perceptions and evaluations would be of greater future use to the administration" (p. 5).

He wanted to know if the courses actually met the perceived needs of students.

Among other areas, his research focused on course relevance, and his major question was whether the program met graduates' expectations. He specifically was interested in having graduates evaluate how much help the courses were and how they perceived the program.

The populations under study were two selected classes of graduates from the Master of Business Administration degree program and included a total population of 108 graduates. Using the program's alumni roster, he sent a cover letter, a questionnaire, and a return envelope. After an initial slow response rate, he attempted to call all the nonrespondents. Eventually he experienced a return rate of 58%.

The graduates were asked which courses they enjoyed the most and the least.

They were also asked which courses were of greatest help and the least help to them since they had left the program. There were different responses from the two selected classes.

Both classes enjoyed their Personnel and Marketing classes the most, while Economics, Policy, and Legal courses were not well liked. The Personnel course again was rated as the most helpful class to both groups, while the Economics and Legal courses were found to be the least helpful.

Graduates were also asked to respond to a very simple question: "The program met my expectations?" (p. 58). With a mean score for both surveyed classes of 3.5 out of a possible 4.0, he concluded, "In spite of any criticisms or shortcomings the graduates believed that the program met their expectations" (p. 59).

There were several findings from Geromel's study with direct implication to this present study. He questioned graduates on the aspect of working with groups. One hundred percent of one of the groups and 96% of the second group agreed that working on group projects was a valuable part of their educational experience.

Of particular interest to Indiana Wesleyan University was that Geromel found that faculty in the Michigan State University program, while obviously experts in their fields, did not appear very knowledgeable about the principles of "andragogy." As defined earlier, andragogy is the "art and science of helping adults to learn" (Craig, 1990, p. 121). Geromel concluded that the MSU faculty needed not only to be experts in their fields, but also needed to have knowledge of the teaching of adults. He felt that it was clear that "one of the expectations of the program is students be treated as adults. . . . since it prides itself on being a non-traditional program, its students need to be treated in a non-traditional manner" (p. 123). This knowledge of adult education is a current requirement of all faculty members in the Adult and Professional Studies programs at Indiana Wesleyan University and is continually reinforced through proactive quarterly in-service programs.

Pesulima's Study

Like Ainsworth and Morley, Pesulima (1990) also conducted his research outside of the United States. He looked at perceptions of Master of Business Administration programs in Indonesia. He sought to "investigate the academician and practitioner perceptions on the knowledge and skills of the MBA graduate" (p. 2). He addressed various skills necessary in Master of Business Administration curriculum including decision making, communications, problem solving, and information processing. He felt those students with a "liberal arts undergraduate background are better candidates for the MBA program" (p. 27).

Pesulima strongly emphasized communication skills in his study. In previous research, communication skills ranked as the most important factor or skill to obtain employment and the most valuable course in preparing graduates for management positions (p. 29).

Work experience was also an area of interest to Pesulima. He felt that "experiential learning becomes the center of the activity to produce competent managers who can integrate the different functions and environments into a whole" (p. 40). This concept of experiential learning is also an integral component of all Indiana Wesleyan University courses and again is foundational to its Business and Management degree programs.

His survey research examined the issues of "mastery level in cognitive areas (knowledge or subject matter of core requirements for all MBA students). . . and the degree of importance of non-cognitive (skills and personal characteristics) areas" (p. 68).

His questionnaire was developed with a Likert scale to measure the mastery level in each subject discipline and the degree of importance of the relevant business skills. He improved validity of his instrument by "distributing the questionnaire to a group of 15 business school associate professors and practitioners" (p. 72). They were asked to criticize and suggest improvements for the questionnaire before the first mailing. In addition, a pilot study was conducted with 10 selected respondents to further improve validity.

He distributed over 600 questionnaires to practitioners and 100 to academicians. The practitioners were selected through companies and the questionnaires were initially delivered to personnel managers. Pesulima used phone calls as reminders and eventually achieved a 37% response rate among practitioners and a 40% response rate from academicians.

His major statistical tool was the *t*-test. The *t*-test was used because his study consisted of two groups and because continuous and equal intervals Likert-type scale "fits with the *t*-test statistical test of significance requirement" (p. 77).

Among his findings was that initiative was rated as the most important skill by the academician and the practitioner, while administrative and computer skills were ranked at the bottom of the list (p. 86). Also he found that the "importance of communication skills was obvious" (p. 97).

Pesulima's work is also significant to this Indiana Wesleyan University study.

Communications skills were highly emphasized in his findings and both oral and written communications are emphasized in the Ten Across areas under scrutiny in this study.

Pesulima also examined both the concepts of importance and "mastery," which are similar to this Indiana Wesleyan University study which looks at importance and progress.

Etherington's Study

Etherington (1980) developed a questionnaire to "ascertain the MBA graduates perceptions of the effect of the MBA program on the development of their skills in the technical, human relations, and conceptual areas" (p. 42). He felt that the study "should have immediate interest and value to the faculty and administrators of schools of management" (p. 9) and it "should give educators a meaningful analysis of the perceptions of graduates regarding the degree of success that the program has had" (p. 10).

The design used was a survey research study utilizing a mailed questionnaire designed to describe the reactions of graduate students to the Master of Business Administration curriculum at Syracuse University. His sample survey consisted of graduates of the Syracuse MBA program for 4 selected years and included a total of 415 subjects. He confirmed validity of his instrument through the use of a panel of five experts in the educational and business management areas (p. 42). The panel was asked to confirm, by agreement of a majority of its members, the content validity of the rating questions. He also conducted a pilot study using a sample of 30 graduates from a year other than those selected for the final study.

In order to produce the highest possible return, his initial mailing included the questionnaire and a self-addressed return envelope. A follow-up letter was mailed in 2 weeks to all nonrespondents. A second questionnaire was mailed 2 weeks later to the

nonrespondents, and finally, 3 weeks after the third mailing, a postcard was mailed to the remaining nonrespondents.

He used one-way analysis of variance, *t*-test, and frequency distributions to analyze the data. He concluded that "graduates of the Master of Business Administration program perceive that their academic experience has met their needs to some extent (somewhat above midpoint) in providing them with the necessary administrative skills" (p. 106). He also noted from the study a very strong trend toward part-time students in the Syracuse MBA program. He felt this trend has far-reaching implications for administrators and faculty as they "will want to develop creative and innovative ways to meet the needs of these 'non-traditional' students" (p. 119). Also while the graduates in his study rated the program as meeting their needs to some extent by enhancing their administrative skills, the overall ratings "indicate room for improvement" (p. 119). Etherington's work is significant to this Indiana Wesleyan University study mainly because his findings relate to non-traditional students. Indiana Wesleyan University is also charged with continually looking for better ways to creatively and innovatively meet the needs of its students.

Tilley's Study

Tilley's study (1992) also dealt with how a Master of Business Administration degree program met the needs of its graduates. Instead of using survey research, he interviewed selected business professionals, academic deans, and program directors.

Among questions he sought to answer included: How well an MBA program prepared its graduates for positions of leadership in society? He interviewed a total of six academicians and 10 business practitioners. He, too, looked at various skills, which are

either acquired or refined in the Master of Business Administration program researched. Most respondents in his research were concerned with skills needed on the job, including good communications skills and being a team player. Some of the traits listed as necessary were "teamwork, leadership, vision, knowledge, judgment, integrity, intuition, a sense of responsibility, and enthusiasm" (p. 38). The majority of responses indicated curriculum adjustments, but no significant changes were needed. The data showed a need for a stronger "emphasis on the soft skills including team building, relationships, listening, and writing" (p. 42). He also felt that "most MBA curricula will eventually include the use of "soft skills," especially the use of written and oral communication skills, and a strong emphasis on teamwork" (p. 48). Although this Indiana Wesleyan University study does not ask business leaders or employers their perceptions as to Indiana Wesleyan University graduate preparation, the skills Tilley identifies as being important again match favorably with the Ten Across.

Jenkins and Reizenstein's Study

Jenkins and Reizenstein (1984) surveyed business executives, faculty, and alumni concerning their attitudes towards Master of Business Administration curriculum. Their study sought to provide information on "how well the existing MBA curricula satisfy the needs of those concerned about the degree" (p. 19).

They mailed questionnaires to all Fortune 500 presidents and personnel directors, deans of schools of business, five faculty members from each of the selected schools, and a sample of 1,000 alumni from a given year from all of the represented schools. The survey had an overall response rate of 42%.

There was overall agreement between both academicians and business executives in that they were not satisfied with the oral and written communication skills of recent Master of Business Administration graduates. Majorities of both academicians and business executives felt that the ideal MBA program graduate should be a "generalist rather than a specialist" (p. 20). Both groups also favored an applications-oriented Master of Business Administration curriculum. A majority felt that MBA programs should stress decision making and that there was substantial agreement in the business community that "MBA programs focus too much on ivory-tower concepts instead of on the application of those concepts to real-world situations" (p. 21). Furthermore, the business respondents preferred the case approach rather than the lecture as the primary teaching tools. This specific issue is relevant to Indiana Wesleyan University as many Adult and Professional Studies courses are facilitated using a case analysis approach rather than a lecture methodology. Because of the intensive format of Adult and Professional Studies program delivery, curriculum is designed to be "facilitative" and not rely on a lecture format. Adult students learn more by being involved with the learning, and since most classes at IWU are in the 5 to 6 week timeframe, the instructors do not have the time to only lecture at the students. Collaborative learning must take place, and activities that foster this are written into the Adult and Professional Studies curriculum.

Aiken, Martin, and Paolillo's Study

The Aiken, Martin, and Paolillo study (1994) described an innovative method of determining requisite skills needed by business school graduates. Using a group-decision computer-support system, advisory boards of two universities were able to discuss and

rank these requisite skills. The computer system allows for electronic brainstorming and had the ability to rank-order various skills.

They found that "the ability to communicate and get along with others is perhaps the most important skill for graduating business students" (p. 160). Their results are based on the rankings of both universities' advisory boards. They also found that "practical business knowledge is valued more than theoretical knowledge" (p. 161). Skills such as problem solving and critical thinking were ranked higher with regard to importance than skills in economics, mathematics, and statistics (p. 161). They felt that executives are now considering these generalist skills as more useful than specialist/technical skills.

Curriculum changes were suggested, and the required skills profile showed that "the ability to communicate is of paramount importance. Business school graduates must possess interpersonal skills and practical knowledge" (p. 162). As with the other studies previously cited, I wanted to learn where in the Indiana Wesleyan University study such factors as communications skills and problem solving/critical thinking skills would rank.

Webb and Allen's Study

Webb and Allen (1995) surveyed 1,499 business students at seven Ohio colleges and universities to "investigate the potential benefits students perceive a business graduate degree will offer them" (p. 58). What they hoped to accomplish with their research was to determine the benefits that students expect from completing a graduate business degree.

The questionnaire utilized for the research included various reasons that a student might choose to pursue a business graduate degree including such items as competitive advantage, career advancement, and the development of research and analytical skills.

They used several statistical procedures to analyze the research questions including frequency distributions and Chi-square. They found that a master's degree in business "is perceived by students with the degree as a marketing tool that will give them a competitive edge over students without a master's degree" (p. 61). The most marketable attribute was seen to be "the competitive edge that the degree commands" (p. 69). They also felt that colleges and universities must become accountable to students and businesses and that "business schools must design an effective overall marketing plan that appeals to prospective students' needs and expectations" (p. 71). The meeting of students' (graduates') expectations is an underlying goal of the Indiana Wesleyan University study. If graduates feel that in certain areas they made little or no progress, then it can be surmised that their expectations were not met. Their written comments also would indicate this.

Webb, Njoku, and Allen's Study

The "Quality Control" movement in business and industry has moved into higher education institutions. The concept of Quality Control is becoming an important issue and a major challenge facing today's colleges and universities. In fact, it has been found to be one of the most important factors that separates success from failure in an academic institution (Ivancevich & Ivancevich, 1992).

Webb, Njoku, and Allen (1996) addressed the issue of quality in their study of doctoral business students. They focused solely on "doctoral students' perceptions of institutional and program quality" (p. 11). The population consisted of 980 doctoral business students from 12 colleges and universities in the Northeast United States. Their survey instrument listed numerous questions that respondents could agree with using a Likert scale. The response rate to the mailing of a questionnaire was 40%.

Webb et al. found significant relationships between the doctoral student's perceptions and the school types--public or private (p. 12). Students also indicated that both private and public academic institutions were generally inadequate in "preparing students for changes in the job market, offering weekend and night courses, involving students in policies/curriculum changes, and preparing students for data analysis" (p. 14).

The implications of this study are far-reaching to all academic institutions, especially to Indiana Wesleyan University. In its continuous effort to upgrade and assess its academic offerings, Indiana Wesleyan University must listen to and address student needs. Webb felt that "to improve quality, administrators. . . . should pay close attention. . . as competition among public and private academic institutions intensifies, quality may make the difference between an institutions success and its failure" (p. 17).

Atherton's Study

In his research at Nova Southeastern University's School of Business and Entrepreneurship, Atherton (1996) developed a survey instrument to "gather data for use in assessing a variety of administrative and academic aspects of the School's programs" (p. vi). He linked quality indicators on the survey directly to accreditation criteria

established by the Southern Association of Colleges and Schools. His population consisted of 2,206 recent graduates of the School, and he had a 32% response rate.

Overall, his outcomes were very positive towards the University. Ninety-two percent of all respondents agreed or strongly agreed that the School had "helped them meet their educational goals" (p. 5). Furthermore, 93% of respondents indicated that the School had a "moderately or very positive impact" on acquiring the knowledge and skills needed for a career.

This last outcome and the fact that at the time of the study Nova Southeastern was in the process of self-study in preparation for reaffirmation of accreditation by the Southern Association of Colleges and Schools have direct significance to Indiana Wesleyan University and this study. Since the North Central Association of Colleges and Schools continually reaccredits Indiana Wesleyan University, any measure that can assess academic achievement or student satisfaction will be helpful in preparing itself for the self-study process.

Martin and Bray's Study

Martin and Bray (1997) assessed a non-traditional Master of Business

Administration program to determine "overall student satisfaction" (p. 17). They believe that in redesigning MBA programs, universities should adopt a market-based philosophy, in other words, "customer input in the form of information developed through satisfaction assessments" (p. 16).

They surveyed 200 currently enrolled Master of Business Administration students at a Southeastern public university. Their survey instrument was developed to determine

student satisfaction with the program. The guiding premise and motivation for their study was that "assessment of customer satisfaction must play an important role in resource allocation decisions targeted to enhancements of MBA program quality" (p. 26). This concept of customer satisfaction is basic to the Indiana Wesleyan University study. As was stated above, lack of progress can be linked to not meeting expectations from a customer satisfaction standpoint.

Schmidt's Study

The purpose of the Schmidt study (1991) was to "identify skills that were developed or enhanced by the program and as an evaluation by alumni of whether their level of development in those skills provided them a competitive edge compared to peer workers from other institutions" (p. 15).

She surveyed all undergraduate alumni of the business programs at her school. She achieved a 33.4% response rate by using only a single mailing of a questionnaire and no follow-up mailing. She found that several skills were developed through the curriculum. The main skills found to be enhanced were analytical and communications (p. 117).

Her study noted that the main benefits the school provided graduates were "strong analytical/thinking ability, the use of teamwork, the real world experiences, and the oral and written communications abilities" (p. 123). Her conclusions all relate to Indiana Wesleyan University and this study as the benefits she identified are linked one-to-one with the Ten Across, which is the focus of this study.

Schmidt concluded her study with the following observation: "A program must be true to the institution's mission and its proven abilities if its reputation is to be maintained" (p. 127). Being "true to the mission" is certainly a goal that Indiana Wesleyan University must espouse to and one that cannot be forgotten.

Martiniak's Study

Martiniak (2000) evaluated an evening MBA program to "determine if improvements are needed to better serve the clientele" (p. 3). She felt that her school "needs its customers to be satisfied customers" and the school needs to be perceived as "one that increases the business knowledge and skills that are necessary in today's competitive business environment" (p. 5).

She developed a survey instrument based on a series of skills, personal characteristics, and subject knowledge that "every business school graduate should possess" (p. 6). As in the other research mentioned above, these skills included such items as basic skills in written and oral communications. Her survey was intended to judge students' perceptions. She felt that "by allowing the MBA students a voice, one hears not only about their perceptions but also their interpretations of the MBA program" (p. 6). Martiniak found among other things that graduates described the MBA as "improving their communication abilities" (p. 7).

Martiniak's research is especially relevant to this research study. Not only did she survey graduates as to their perceptions of program effectiveness, but her research was conducted on a part-time evening MBA program, exactly the make-up of Indiana Wesleyan's Adult and Professional Studies programs being researched in this study.

Summary of Graduate Surveys of Business and Management Programs

One study, Annis and Rice, 1992-probably more than any of the others cited, has the most direct relevance to this Indiana Wesleyan University study. It examined qualities inherent in business programs much like the Adult and Professional Studies' Ten Across. It asked graduates how important they felt certain qualities were and also their level of preparation within each of the areas. The methodology for conducting their survey also served as a model for this Indiana Wesleyan University research. But probably the most salient issue is the fact that the Annis and Rice study was conducted at a Christian institution and brought in the factor of a Christian higher education.

Paranto and Champagne (1996) identified skills that community leaders in business felt were necessary in preparing students, including: critical thinking skills, communication skills, and interpersonal skills. Among their conclusions were: "graduates of higher education programs are lacking in good communication skills—oral, written, and listening—which are necessary to be effective in their jobs" (p. 30). Their research is relevant to this Indiana Wesleyan University study because their recommendations go to the heart of the Adult and Professional Studies learning methodologies. Adult and Professional Studies programs are built on collaborative learning activities (study groups); have writing assignments and oral presentations integrated into all classes.

Geromel's study (1993) has particular interest to this Indiana Wesleyan University research. He found that faculty at his institution were not very knowledgeable of adult education principles and that students needed to be treated in "a non-traditional manner" (p. 123).

Martin and Bray (1997) also assessed a non-traditional MBA program at their institution. They were concerned with program quality and "assessment of customer satisfaction" (p. 26).

Finally, Martiniak (2000) examined an evening, part-time MBA program, exactly the make-up of Indiana Wesleyan University's APS programs. She, too, conducted her research to give MBA "students a voice" (p. 6) and to survey graduates to determine program effectiveness.

Graduate Surveys of Other Academic Disciplines

The previous section of the Literature Review examined numerous studies of business and management programs, how graduates were surveyed to determine their attitudes and perceptions about program effectiveness, and what makes programs successful. This following section further examines academic program reviews, although not in the area of business and management education. The inclusion of these studies was felt necessary because many of the studies reviewed dealt with the same skill sets reviewed in the previous section and asked graduates their perceptions of program effectiveness.

Rose and Mohapatra's Study

Two studies examined graduates of Master of Public Administration (MPA) programs. Rose and Mohapatra (1995) focused on the perceptions of MPA graduates about their public administration curriculum. They attempted to seek answers as to how both practicing public administrators perceive Public Administration graduate curriculum and also how MPA holders view their curriculum.

The samples of public administrators having earned a Master of Public Administration were solicited from all universities and personnel directors from the 50 states and Puerto Rico. Nearly 20,000 surveys were mailed with a 35% response rate.

The survey instrument listed various fields of knowledge (skills) and asked respondents to rate each to the extent they felt each was necessary and important on their job as a public administrator. Among these fields (skills) were: organizational behavior/interpersonal relations, information/computer utilization, program evaluation, financial administration, legal issues, and communications.

Rose and Mohapatra (1995) found that Master of Public Administration degree holders felt that certain areas of knowledge were more important than for those practitioners holding only a baccalaureate degree. Among these included: organizational behavior/interpersonal relations, program evaluation/research methodology, and policy analysis. Although this study did not address business school graduates, its implications are still significant. Weighing the importance of skill areas is one of the key questions addressed in this Indiana Wesleyan University study.

King, Britton, and Missik's Study

King, Britton, and Missik (1996) surveyed Master of Public Administration graduates of two institutions relative to their perceptions of what is important in their careers and how an MPA contributes to their careers. The authors were also interested in skills, knowledge, and key values. Their intent was to examine how two different Master of Public Administration programs were "reflected in the eyes of MPA alumni to see how

different or similar the program experience is and how that difference or similarity may affect alumni" (p. 146.)

The two programs examined were Evergreen State College in Olympia, Washington, and the University of Akron, Ohio. Evergreen's curriculum is characterized by interdisciplinary studies, team-teaching, and seminars. The program was designed to "develop analytical, administrative, and communication skills" (p. 147). Students in the Evergreen program are primarily working adults with an average age of 37.

Akron's program seeks to "provide skills and training to make students effective public administrators, develop conceptual skills and analytical tools for policy and management decisions situations and develop organizational skills" (p. 147). Only half of Akron's students are in-service students with an average age of 30.

The survey instrument included items that represent possible outcomes of a Master of Public Administration curriculum. Respondents were asked to indicate "1) How much they gained/or how much the program helped them in this area, and 2) How important the item was to their career" (p. 148). A Likert scale was used to measure the responses.

Surveys were sent to 237 alumni and reminder postcards were not mailed. Evergreen alumni experienced a 43% response rate, whereas Akron had a 44% response rate.

The questions that asked about the skills, knowledge, and values that Master of Public Administration alumni believe are most important elicited an interesting response. Those skills and knowledge that were found to be important by the Evergreen Alumni were not ranked as high by Akron's alumni. As noted in Table 2 below, there existed a disparity in the responses. As in many of the other research studies documented above, the areas of oral and written communications were found to be of higher importance in the

non-traditional program at Evergreen. The more important areas from the Akron survey indicated that intellectual and personal growths as well as improved credibility were more important. Much like the Ten Across used at Indiana Wesleyan University; those areas examined in this study were ranked as important.

King et al. (1996) felt that although there exists these differences between the two programs, "the programs appear to be teaching what they espouse, at least with regard to alumni perceptions of what they 'gained' from their MPA experiences" (p. 154). This research also has a direct relationship to the Indiana Wesleyan University study. It essentially looked at similar skills, albeit in Master of Public Administration programs, instead of business.

Table 2

Evergreen State College and University of Akron Research Results

Item	Evergreen Rank	Akron Rank
Writing skills	1	9
Oral communication skills	2	6
Intellectual growth	3	1
Creative thinking	4	4
Self-confidence	5	7
Problem solving/ decision making	6	11
Improve credibility	7	3
Group process/consensus building	8	16
Personal growth	9	2
Improve ability to manage change	10	10

There were also studies undertaken in the field of education. Smart and Hagedorn (1994) surveyed doctoral students relative to their gains in the four domains of professional competence including thinking, decision-making, valuing, and acting. The purpose of their study was to "assess the hypothesized relationships between the four educational strategies and the four professional competency domains that were derived from Kolb's experiential learning model" (p. 246).

All doctoral candidates in Education from the University of Illinois, Chicago (N=711), were sent surveys that requested information concerning graduate experiences as well as general information. They received an overall response rate of 85%.

Included in the questionnaire were two sets of items intended to reflect students' self-reported perceptions of the educational strategies employed in the respective doctoral program and their professional competency development as a result of enrollment in the graduate program (p. 247). The survey also included a set of 20 items which asked respondents to "indicate the extent to which you have gained or made progress in developing each of the following skills or competencies. . . . as a result of your enrollment in your graduate program" (p. 249). This "progress" aspect of their research has direct relevance to the Indiana Wesleyan University study as well. Assessing a graduate's perception of their progress in the development of skills is an area of research conducted across multi-disciplines.

The results of this study clearly demonstrated that "students' perceptions of their development in human relations, reflective thinking, and research competency were related to the types of educational strategies they perceive their doctoral programs as employing" (p. 254). Their findings indicated that "efforts to improve human relations competencies

of doctoral candidates would profit from an emphasis on divergent strategies that focus primarily on the development of imaginative abilities and sensitivity to the feelings of others" (p. 255).

Ravid and Roth's Study

The Ravid and Roth (1995) study asked teachers to rate the importance of various research skills gained in their graduate education. The main objective of their study was to "create an opportunity for in-service and preservice students to share their perspectives and opinions about the importance, relevance, and application of research skills and knowledge to teaching" (p. 8). The population surveyed in their study included 167 students who were at various points in their pre-service and in-service graduate teacher education programs. Most were enrolled in a Master's of Arts in Teaching program at a small Midwestern university.

The survey instrument contained items related to different types of research skills and experiences, and the respondents were asked to rate each as to their perceptions of relative importance. For each item, students were also asked to provide a narrative explanation to justify their assigned rating. This format "allowed quantitative and qualitative data to be integrated and synthesized to yield a more complete understanding of respondents' perceptions" (p. 8). Surveys were distributed during class time and respondents were also given time in class to complete the surveys.

Students rated "the ability to use the library" and "the ability to critically analyze professional literature" as being the two most important research skills for teachers to acquire (p. 9). The two skills rated as least important were "publication of research

findings in the professional literature" and "knowledge of how to compute and interpret intermediate or advanced statistics" (p. 10).

Fasko, Osborne, and Grubb's Study

Fasko, Osborne, and Grubb (1996) sought to determine what "supervising teachers and novice teacher education graduates believe is important for successful teaching and evaluation of how well their teacher education programs prepared the teacher education candidates in these areas" (p. 6). The authors felt that there was a decided lack of information about teaching skills and teaching knowledge that new teachers believe to be important in preparing them for teaching. In other words, a "report card on teaching" (p. 18) was necessary. As with other studies mentioned previously, this research has direct significance to Indiana Wesleyan University as the research examined graduate perceptions as to the importance of various skills gained while a student. Using this type of research will assist administration on making necessary curriculum changes as well as document student achievement and satisfaction.

The authors sent 251 surveys to recent teacher education graduates. Among the questions on the survey were included items with a Likert format in which the graduates rated both the importance of various statements as well as the effectiveness of the training they received. The survey included a self-addressed return envelope, and due to funding restrictions, only one follow-up mailing was conducted. The overall response rate was 23%.

Their approach in evaluating the data was to "determine the discrepancy between how important a teacher competency was judged to be compared to how effectively the university taught the teacher education student the competency" (p. 18). Their biggest concern was in those areas where 80% or more of the respondents expressed the belief that the component was important or very important, and less than 80% judged the component as having been effectively or very effectively taught. This issue could prove to be a potential problem in the Indiana Wesleyan University study as graduates could perceive 1 of the 10 skills as very important but believe that they did not show corresponding progress. Theoretically, if a particular area is found by a graduate as important for the school to teach, but one in which little progress was evidenced, then the school must make changes to correct this problem. As was mentioned previously, if Indiana Wesleyan University finds areas that require improvement, it has time prior to its reaccreditation visit to at least develop a strategy to correct the problems.

The study conducted by Fontana (1993) examined education students' experiences while in a doctoral program in educational leadership. Her study investigated students' experiences in a number of aspects of the doctoral program. She used a qualitative approach to her research and held two focus group sessions among seven part-time students. The main reason this study was selected for review was because it examined student experiences to determine the "strengths, weaknesses, and recommendations for improvement" (p. 13).

Miller and Doefert's Study

The Miller and Doerfert (1995) study described experiences of graduates of an offcampus agriculture degree program. They specifically wanted to describe the perceptions held by graduates of their program. Off-campus degree programs are becoming more common as universities recognize the need to extend educational opportunities beyond the borders of the traditional campus to adults who are otherwise unable to pursue degrees through traditional means (again, one of the foundations of Indiana Wesleyan University's Adult and Professional Studies programs).

The population examined in this study included all graduates of the off-campus professional agricultural degree programs of Iowa State University, including forty-six master's degree recipients and seven bachelor's degree holders. A questionnaire was developed which asked pertinent questions related to graduates' experiences with the off-campus program. A Likert-type scale was utilized to measure the significance of the graduates' perceptions. A panel of faculty and graduate students established content and face validity for the questionnaire in the agriculture education department. Furthermore, ten students currently enrolled in the off-campus program participated in a field test of the survey instrument.

The questionnaire, a cover letter, and a stamped return envelope were sent to all graduates. Four weeks after the initial mailing, another complete package was sent to all nonrespondents. Telephone calls were made to nonrespondents after another two weeks to encourage their participation. An eventual 87% response rate was realized.

Appropriate statistical analysis including frequencies, percentages, means, standard deviations, and correlations were used.

The authors felt that the results of their study had "direct implications for college teaching--particularly distance teaching" (p. 421). Data from the study indicated preferences of the graduates and compared many of the obstacles encountered as students in an off-campus program. The authors felt that "faculty should routinely consider the

learning preferences of their students when planning, organizing, and delivering courses" (p. 421). A body of research exists which demonstrates a significant improvement in student achievement and attitudes when teaching styles are congruent with learner preferences (Griggs, 1991). Being creative and innovative in teaching methodologies is a continual effort at Indiana Wesleyan University.

Keenan's Study

Keenan (1993) investigated the attitudes of both engineering students and graduates related to how courses prepared them for professional practice. He found that there has been research in the engineering field that has proposed "broadening the curriculum to include non-technical components, and giving greater emphasis to the practical applications of theoretical knowledge" (p. 255). There is considerable evidence that engineers are "often ill-prepared for managerial roles" (p. 256).

Keenan sought to evaluate a specific group of enhanced engineering courses. These courses add an additional year to a student's education (the study took place in the United Kingdom), but business and management subjects take up the additional teaching time. The sample population consisted of current students of the enhanced courses (n=167) as compared to students in conventional engineering courses (n=353). He experienced an overall response rate of 71%.

The enhanced students were broadly satisfied with their curriculum, whereas a majority of the conventional students believed that "there should have been more time devoted to these subjects" (p. 259). The enhanced students felt that they would like to have seen even more management input into their courses.

This study, like the others previously examined, has direct relevance to this Indiana Wesleyan study. Student satisfaction and curriculum issues are of prime importance to this research.

Lucas and Dincher's Study

There have also been studies conducted in the field of healthcare education. Lucas and Dincher (1995) sought to evaluate the nursing program at their school by distributing a survey to its graduates. Their main purpose was "as a means of evaluating the program" (p. 1). They developed a survey instrument that was sent to 114 alumni of the 1994 graduating class. They sent a second mailing and also used a telephone prompt, which resulted in a 60% response rate. Their intention was for the recent graduates to evaluate their experiences while at the college.

They found that, for the most part, graduates rated all aspects of their nursing education program as more than adequate and felt more than adequately prepared for all the aspects of their jobs. Ninety-seven percent of the graduates were at least satisfied with their education, and preparation in basic nursing principles was rated highest as "close to excellent" (p. 3). Of particular interest to Indiana Wesleyan University is that the survey instrument examined various skills gained while the program graduates were students. Included among these skills were verbal and written communication skills, problem solving, technical job skills, and participation in multi-disciplinary teams. These skills specifically match some of the aforementioned Ten Across skills which are the focus of the Indiana Wesleyan University study.

Perry and Gebert's Study

Perry and Gerbert (1995) researched graduate perceptions of preparation for and importance of various curriculum topics in a dental hygienist program. It is expected that dental hygienist possess certain skills and knowledge. They felt that "graduates' opinions of topics taught in the curriculum can provide insight into the importance of items to the work environment and an evaluation of the adequacy of preparation" (p. 830).

They designed their survey instrument to "assess graduates' perceptions of preparation for practice with respect to various curricular topics, evaluation of the importance of those topics to practice, and demographic characteristics of the dental hygiene graduates" (p. 831). The survey population consisted of 89 graduates, and two mailings were made, the second at a one-month interval. The overall response rate was 79%.

The authors felt that "graduates' perceptions provide insight that can pinpoint weaknesses and strengths to current dental hygiene practice in the community" (p. 833). Furthermore, the model they formulated "presents a way to assess graduates' perceptions of knowledge gained, to see if the curriculum meets their perceived needs in practice.

.and should certainly be considered as important to curriculum review and evaluation" (p. 833).

The overall response to their survey suggested that students considered themselves "well-prepared on topics considered very important to practice, and adequately prepared on topics considered less important to practice" (p. 834). The implications of their research are important to any authors conducting graduate surveys as "graduates"

perceptions of the curriculum can be informative, lead to analysis of topics offerings, and identify ways to maintain contact with graduates" (p. 834).

Gerber and Foster's Study

Gerber and Foster (1995) surveyed graduates of a criminal justice degree program. Their goal in conducting the research was to "learn about former students' assessment of their experiences. . . and their evaluation of how SHSU [Sam Houston State University] prepared them for the work environment" (p. 3).

Their survey examined all students who received baccalaureate degrees in criminal justice for three given years. An initial postcard mailing informing graduates of the upcoming survey was initially sent which eliminated a portion of the survey population who were deemed undeliverable. Two weeks after the initial postcard mailing, a cover letter, postage-paid return envelope, and the survey were mailed to the graduates. The cover letter explained the "nature of the survey and assurances of confidentiality" (p. 4). Nonrespondents were sent reminder postcards after two weeks and, after ten additional days, new questionnaires were sent to nonrespondents. The eventual response rate was 48%.

Of particular interest to this Indiana Wesleyan University study were the responses relating the specific skills. More than 90% of the respondents stated that "the university prepared them for their current educational or professional situation in verbal communication, written communication, social interaction, organizational skills, and reading skills. . .but the percentages are lower for preparation in public speaking (79%), computer literacy (49%), cultural awareness (73%), and mathematical skills (53%)" (p. 7).

As with many of the other previously mentioned studies, these skills evaluated in this study are similar to the Ten Across skills which are the focus of the Indiana Wesleyan University research.

Other Recent Studies

There were a number of recent studies conducted which were general in nature. In other words, they did not examine a particular major or program. The reasons for their inclusion in this research relate to the nature and type of research undertaken by the various authors. All dealt with the surveying of graduates and their attitudes or perceptions. It was felt that these studies would further substantiate the purpose for and rationale behind this Indiana Wesleyan University research study.

Dixon et al. (1992) conducted research at their university with the hopes of providing "critical information. . . and to assess the effectiveness of University programs" (p. 1). The survey instrument was designed as "an assessment of the effectiveness of the University as perceived by University graduates. . . . The results of the assessment were to be used to improve University programs and services" (p. 3).

A stratified sample for the study was randomly selected from a list of graduates between 1985 and 1991. Three groups were selected representing graduates of the three divisions of the University: Applied Social Sciences, Technological Studies, and Management and Business. There were 67 graduates selected from each of the divisions for a total population of 210. A response rate of 22.3% was realized.

A preliminary survey instrument was developed and distributed to each of the University's three divisions for review, comments, additions, and suggestions. Revisions were made and a final review was undertaken. To encourage return of the questionnaire,

a postage-paid return envelope was included along with a cover letter. A second mailing was not conducted; however, an announcement was made in the University's alumni newsletter (p. 5).

Section III of the survey was developed to "determine student perception of the effectiveness of the University in accomplishing its mission" (p. 12). It asked respondents to "rate how effective they believed the University had been" (p. 13). As in many of the other studies already reviewed, certain skills were rated in the survey including communication skills, problem-solving abilities, the ability to think critically, and writing skills.

The authors of the study made numerous recommendations to their University based on the findings of the study. They felt that one conclusion was obvious: "Change at the University of Central Texas is sought by its graduates in an attempt to turn the University into the ideal University which the graduates believe it could be" (p. 18).

Krahn and Silzer (1995) discuss in their study the history, administration, and function of the university's exit surveys along with results from a selected year. At the University of Alberta, the decision was made to "undertake surveys of graduating students, asking them to evaluate their educational experience" (p. 12).

They felt that students expect a "commitment to continuous improvement. . . and a greater commitment to performance assessment" (p. 13). Since the inception of the university's program, all undergraduates receiving degrees at the convocation ceremony have been given a questionnaire with a return-addressed envelope. They are encouraged to complete the questionnaire and return it in collection boxes around the campus.

Students who do not attend the ceremonies are sent the survey. Efforts have been made

to stress the importance of the survey, but despite these efforts, response rates have been relatively low, roughly 35% (p. 16).

Among the various issues covered in the exit survey are the relative improvement in various skills and competencies. Included among these are: ability of the student to learn on their own, critical judgment, problem-solving skills, creative thinking, leadership skills, writing skills, speaking skills, and appreciation of ethical issues. Of interest, the 1993 survey results showed that older graduates "were more likely to report improvements in writing skills and creative thinking while younger graduates were more likely to concentrate on their improved problem-solving skills and to work independently" (p. 18). These skills also are similar to the Ten Across skills currently under study in this Indiana Wesleyan University research.

Donald and Denison (1996) sought in their research to examine the "utility of broad indicators of performance in undergraduate education such as students' satisfaction with their program. . . .for use in quality assurance and program improvement" (p. 23).

They argue that "alumni can provide valuable insight, since they have the benefit of hindsight and can evaluate college and work experiences and their relative importance" (p. 24).

The authors developed a survey form consisting of twelve questions designed to send to all graduates. The survey form asked demographic questions relating to year of graduation and field of study (major). Other issues on the survey included graduates being asked about the relevance of their undergraduate education to their present job.

Respondents were asked to "rate the quality of the preparation provided by their undergraduate education for their graduate studies. . . .their overall satisfaction with the

quality of their educational program. . . and the quality of teaching" (p. 25). The survey was mailed to all graduates from 1983 to 1992 (n=2942). A self-addressed return envelope was included to encourage return of the survey, which resulted in an overall response rate of 12%.

The most frequently mentioned feature of their education was the ability to analyze, synthesize, and think critically (p. 28). The development of students' communication skills, both verbal and written, was also considered important as a criterion for student quality. Students did offer advice to the university to "make sure people learn proper presentation skills. . .and continue to teach courses that teach presentation skills" (p. 29). This research is of particular interest because one of its demographic questions includes graduates major, the same issues under consideration in this Indiana Wesleyan University study.

Culver (1993) sought information from an adult-oriented program relating to program effectiveness, degree quality, and student satisfaction. The focus of his study was on outcomes (p. 24). His sample population consisted of 37 graduates of the Adult Degree Program as well as 122 current students from Radford University.

A questionnaire was developed that asked questions about overall satisfaction with the University and the program along with specific questions about satisfaction with particular aspects of their experiences, such as quality of instruction and clarity of degree requirements. In addition to these questions, the alumni survey asked respondents to make judgments about the effect of the program on a personal level and on their employment. One additional mailing resulting in a response rate of 73% of alumni and 84% of current students followed the initial mailing.

Overwhelmingly, the alumni expressed positive feelings about their experience at Radford (p. 24). The most liked aspect of the Adult Degree Program was the support from staff and faculty members (p. 25). The capstone senior project was the most mentioned item in the least-liked category (p. 26). The current students also responded favorably as 99% felt "satisfied" or "very satisfied" with their overall experience at Radford (p. 26). Flexibility was the most liked aspect of the program, whereas the senior project was also the least liked part of the program (p. 28). The authors found that "students and alumni felt the degree would have a positive effect on their lives, leading them to increase their chances of better employment: changing jobs, having increased responsibilities, incurring more respect from supervisors and co-workers" (p. 28).

Finally, Mohan (1990) conducted a descriptive study, which examined the perceived importance of an Adult and Community Education graduate degree in obtaining the respondents' current employment. It was hoped that its results could prove helpful to faculty "in the decision-making process regarding curriculum changes" (p. 2).

The population used for the study included all current students (n=67) and past graduates (n=171). A questionnaire, along with a cover letter was mailed to the population. To facilitate the return of the surveys, a postage paid envelope was also included. The questionnaires were coded to help the department correct their mailing list; however the recipients were assured that their replies would remain strictly confidential.

Of the total returned, current students had a 60% response rate and alumni a 44% rate. Among other questions asked on the survey, respondents were solicited on how important they thought their degree was in acquiring their present position. The median response was found to be only moderately important (5.03 when 10.00 is most important).

Again, rating perceptions of graduates' attitudes towards "importance" relates to this Indiana Wesleyan University study.

Summary of Literature Review

The literature review was organized around four general areas: Theoretical Constructs of Adult Learning, Requisite Skills for Business and Management School Graduates, Graduate Surveys of Business and Management Programs, and Graduate Surveys of Other Academic Disciplines.

First, the concept of andragogy was defined as "the art and science of helping adults learn" (Craig, 1990, p. 121). Since Indiana Wesleyan University's adult programs are designed using adult learning theory, the theoretical constructs of adult education principles were examined. All of the Indiana Wesleyan University Adult and Professional Studies programs are founded on adult education principles and courses are "facilitated" as opposed to "taught." Adult education principles revolve around such concepts as the students' experience, instruction that is problem centered and self-directed, and the application of instruction in the workplace. These concepts are foundational to all Adult and Professional Studies curriculum and are overtly considered when instructing in the classroom.

Next, previous research was examined relating to requisite skills for graduates of business and management programs. There exists a body of research that recommends specific skills to be taught in business programs. It is the linking of the skills to the Ten Across that forms the foundation of this research.

Business schools are expected to develop curriculum around what is often called the "common body of knowledge." This "body" covers five major functional areas, including: (a) production, marketing, and finances; (b) economics, legal, and ethics; (c) accounting, quantitative methods, and information systems; (d) organizational theory, behavior, and interpersonal communications; and (e) administrative processes, analysis, and policy (Porter & McKibbon, 1988, p. 59). Courses in most business programs are developed using this "common body" as a guide. Indiana Wesleyan University's Business and Management programs include courses which cover the "common body of knowledge."

The Porter and McKibbon (1988) study found that "the curriculum should emphasize the development of various skills and personal characteristics" (p. 71). Their research identified nine particular skills and personal characteristics, which included:

Analytical; Computer; Decision Making; Initiative; Leadership/interpersonal skills; Oral communications; Planning/organizing; Risk taking; and Written communications. Their list of nine skills and personal characteristics compares very favorably to Indiana Wesleyan University's Ten Across.

The third area of the literature review chapter dealt with the body of literature specifically covering perceptions/attitudes of graduates of business and management programs from other colleges and universities. There has been significant research undertaken that has examined business school graduates' perceptions of the quality of their education.

One study, Annis and Rice, 1992-probably more than any of the others cited, has the most direct relevance to this Indiana Wesleyan University study. It examined qualities inherent in business programs much like the Adult and Professional Studies Ten Across. It asked graduates how important they felt certain qualities were and also their level of preparation within each of the areas. The methodology for conducting their survey also served as a model for this Indiana Wesleyan University research. But probably the most salient issue is the fact that the Annis and Rice study was conducted at a Christian institution and brought in the factor of a Christian higher education.

Further research studies identified skills that community leaders in business felt were necessary in preparing students, including: critical thinking skills, communication skills, and interpersonal skills. Among conclusions were "graduates of higher education programs are lacking in good communication skills—oral, written, and listening—which are necessary to be effective in their jobs" (Paranto & Champagne, 1996, p. 30). Their research is relevant to this Indiana Wesleyan University study because their recommendations go to the heart of the Adult and Professional Studies learning methodologies. Adult and Professional Studies programs are built on collaborative learning activities (study groups), integrate writing assignments and oral presentations in all classes, and communications and critical thinking are part of the Ten Across life-skills.

Finally, similar studies of varying academic disciplines were also examined.

Among other "majors" examined, Master of Public Administration graduates were surveyed relative to their perceptions of what is important in their careers and how an MPA contributes to their careers. As with the business programs that were analyzed, key skills were identified and assessed.

CHAPTER III

METHODOLOGY

The overall purpose of this study was to determine the perceived attitudes of Adult and Professional Studies Business and Management graduates regarding the importance of and their progress in the Ten Across areas. The intention of the study was to find how important it is for Indiana Wesleyan University to develop these qualities in its graduates, based on its graduates' perceptions, and also to show what level of progress graduates perceived they made in each of the skill areas.

Description of Population

As stated in the Indiana Wesleyan University Division of Adult and Professional Studies mission statement, the Adult and Professional Studies mission is to "make post-secondary Christian liberal arts education accessible to working adults" (Indiana Wesleyan University, 1997, p. 5). The Division was created to serve the "adult population" of Indiana (p. 5).

Indiana Wesleyan University first awarded degrees from the Division of Adult and Professional Studies in May of 1987. During the time span from 1987 until 1999, there were over 6,000 Business and Management bachelor's and master's degrees granted.

Table 3 indicates the total number of degrees awarded by both undergraduate and graduated majors.

Table 3

Total Business and Management Degrees Awarded, 1987-1999

Degree	Degrees Awarded		
B.S. in Business Administration	1,954		
B.S. in Management	835		
M.S. in Management	1,115		
Master of Business Administration	2,163		
Total	6,067		

Among other admission requirements, the bachelor's degree requires "a minimum of two years significant full-time work experience beyond high school" (Indiana Wesleyan University, 1997, p. 34). Both graduate degrees require a baccalaureate degree, but also require "a minimum of three (3) years significant full-time work experience" (Indiana Wesleyan University, 1997, p. 46). Therefore, it can be seen that Adult and Professional Studies Business and Management students are older adults who work full-time and attend classes on a part-time basis (although, for Financial Aid purposes, they are considered full time). According to Audrey Hahn, Director of Student Services for the Adult and Professional Studies programs, the average age of Adult and Professional Studies undergraduate students is 36.2, while the age of graduate students is 35.8 (personal communication, February 11, 2003).

As described earlier in this study, Indiana Wesleyan University forged 10 goals in its curriculum development. These goals, which are interrelated across the entire

curriculum, have been labeled the Ten Across. Since the Ten Across was not added to the curriculum until 1995, surveying alumni who graduated prior to this time would not prove meaningful. They would not be aware of the Ten Across guidelines and could not complete the survey with any level of accuracy. Therefore, it was decided to survey only graduates from 1996 through 1998. As shown in Table 4, the number of graduates of bachelor's and master's-level degrees in Business and Management within Adult and Professional Studies for this time period was 2095.

Table 4

Number of Business and Management Degrees Awarded, 1996-1998

Degree	Degrees Awarded
B.S. in Business Administration	810
B.S. in Management	385
M.S. in Management	295
Masters in Business Administration	<u>610</u>
	2,095

While other descriptors such as income level and job classification are often asked for in graduate attitudinal surveys, for the purposes of this study, the only demographic descriptors are the highest degree awarded (major) and gender. The Assessment Office within the Adult and Professional Studies programs at Indiana Wesleyan University conducts periodic surveys of graduates and includes such demographic factors as income and job attainment. It was decided that these factors were outside the scope of this research study, and could better be ascertained through the use of another survey.

Instrument Design

The previously mentioned research studies utilized traditional survey research.

Paranto and Champagne (1996) developed an instrument that used a 5 point Likert-type scale that measured employers' perceptions regarding the quality of education at the institution they reviewed. To ensure validity, they used the "critique process" (p. 14) to determine items that were unclear or ambiguous on the instrument.

Geromel (1993) also used a questionnaire approach. His questionnaire asked graduates to "evaluate how much help the courses were and how they perceived the program" (p. 7). Geromel tested for content validity by giving his questionnaire to a selected group and asking for their feedback and comments. By giving the questionnaire to a small group of people before the actual survey was conducted, it gave the "experimentor an opportunity to observe error and shortcoming" (p. 32).

Ainsworth and Morley (1995) also used a Likert-type scale questionnaire in their research. They felt that the good response rate and the fact that all responses received were usable were "encouraging signs of a valid questionnaire" (p. 178). Annis and Rice (1992) designed their questionnaire to "discover whether graduates felt the department goals were important in the 'real world' and how well they felt the department and the school had prepared the graduates" (p. 4).

Kassner and Fertig (1992) surveyed Executive Master of Business Administration alumni about their perceptions of program content. Their questionnaire used a 6-point Likert scale to determine "the extent to which topics were addressed or should have been addressed" (p. 245) during their Executive Master of Business Administration program. Furthermore, Mohan (1990), Thaller (1993), Miller and Doerfert (1995), Ravid and Roth

(1995), Rose and Mohapatra (1995), Webb and Allen (1995), and Jenkins and Reizenstein (1984) all utilized questionnaires in their research. Tan (1996) surveyed students to determine what "outcomes" they perceived as important and which "outcomes they perceived they had "progressed" the most in while they were in college (p. 176). It appears that surveying alumni is an effective method used in collecting quantitative data on graduate's attitudes.

The Likert scale was used based mainly on issues of reliability and validity. It has been found that Likert scales are "highly reliable, and have been successfully adapted to measure many types of affective characteristics" (Gable & Wolf, 1993, p. 50). This Indiana Wesleyan University study was concerned with the perceptions of graduates, much like what DeVellis (1991) noted in his research. He found that Likert scales are widely used in "instruments measuring opinion, beliefs, and attitudes" (p. 69). Furthermore, Spector (1992) found that there are three good reasons to use Likert scales in instrument design: "reliability, precision, and scope" (p. 4).

An initial version of the survey instrument was developed (Appendix A), and purposely designed to be easy to complete. The survey asked two essential questions related to the Ten Across life-skills:

- 1. How important is it that Indiana Wesleyan University develops the qualities in its graduates?
 - 2. How significantly did you progress in each of the areas?

Using a 5-point Likert scale, the two questions were applied to the 10 life-skills.

All respondents were expected to rate, based on their own individual perceptions, the "importance" of the skills as well as their "progress" within each of the 10 skills.

Pilot Studies

This initial version of the instrument was given to six Adult and Professional Studies administrators and five graduates for feedback. A second version was designed based on the feedback from this review (Appendix B). This feedback recommended the inclusion of lines for graduates to make qualitative comments. Comment sections were added under each of the 10 skills with directions to respondents to indicate how "progress was demonstrated." It was deemed necessary to not only find out how much graduates progressed in the Ten Across, but also specifically in what ways they progressed. The addition of a comments section also coincides with the research by Ravid and Roth (1995) who found that this format "allowed quantitative and qualitative data to be integrated and synthesized to yield a more complete understanding of respondents' perceptions" (p. 8).

Prior to the actual survey being sent to the sample graduates, another "formal" pilot study was conducted. Paranto and Champagne (1996) used a "critique process" (p. 14), Geromel (1993) used a select group (p. 32), Pesulima (1990) distributed his questionnaire to "15 business school associate professors and practitioners" (p. 72), and Etherington (1980) used a "panel of five experts" (p. 42) to test for their instrument validity. Utilizing a group of twelve Adult and Professional Studies Business and Management graduates, the second pilot study population represented both undergraduate and graduate degree recipients. Eight of the twelve graduates used in the second pilot were master's degree graduates and the remaining four were bachelor's degree recipients. The intent of this pilot study was to look for clarity, readability, and the relative ease of response.

Those graduates participating in the pilot study made several recommendations. In the instruction section, the words "important" and "progress" were neither bolded or underlined, whereas in the descriptions of the Likert scale these words were both bolded and highlighted. Based on the recommendations from this second pilot study and for consistency and, more importantly, to emphasize these two issues, in the final version of the survey instrument, these two words were bolded and underlined (Appendix C). Another recommendation was made for the #11 demographic question, which asked for the degree earned at Indiana Wesleyan University. What was found during this second pilot study was that there are graduates who have earned both undergraduate and graduate degrees at Indiana Wesleyan University. Since the question asks only which degree was earned, more than one response could be marked. Since the results of the study were compared by degree received (major), a dual response to this question would cause the survey to be excluded from the results as neither major could accurately be considered. The final version of the questionnaire was changed to reflect this issue. The demographic question as changed asks for the "highest" degree earned, eliminating the possibility of dual answers.

Finally, there were suggestions made to reword the instructions section to make it more clear to the respondents. As seen in Appendix C, the instruction section was reworded to add clarity to the instructions.

To assure that the survey instrument fit on one page, it was decided to move the background information and basic instructions to the cover letter (see Appendix D). The initial versions of the instrument had both "gender" and "year graduated" as part of the demographic information. It was initially decided that only "highest major earned" was

relevant for this research; therefore, the gender and year graduated were removed from the final version of the survey instrument. At the time of the initial mailing, the Adult and Professional Studies administration felt that "gender" was a non-issue. Since all courses are co-educational, different responses from males and females would not necessitate curriculum changes. The "year graduated" was also thought to be irrelevant to the eventual outcome. It was felt that if 1996 or 1997 graduates perceived certain areas unimportant, then any recommendations based on their perceptions would be outdated by the time the data were received.

Unfortunately, after the survey was mailed, Indiana Wesleyan University administration decided that "gender" might, after all, be an item that would prove beneficial to the research. The final survey questionnaire had the "gender" demographic question removed. However, the master list of all alumni from which the sample was taken included their gender. Since the returned questionnaires were coded (to be explained in detail below), each had to be re-coded with their respective gender, upon receipt of the questionnaires. Although the respondents did not actually list their gender, the information was available, and therefore was included in the eventual analysis.

Procedures for Data Collection and Analysis

Selecting the most appropriate sample size had been an area of uncertainty.

Charles (1988) feels that "often, a well-selected sample of 30 individuals is adequate, since samples of that size can resemble the population" (p. 151). Gable and Wolf (1993) suggest "a safe sample size of about 6-10 times the number of people as items" (p. 213).

Finally, Orlich's (1978) chart suggests that for a population size of 2000, a sample size of 361 should be used (p. 89).

Since there exist 20 items on the survey instrument (two questions for each of the Ten Across), using Charles's suggestion of a sample size of 30 seemed inappropriately small. Gable and Wolf (1993) would recommend a sample of 120-200, whereas Orlich's recommendation seemed more realistic. It was decided that a 20% stratified random sample would yield sufficient data to be representative of the entire population under study. Using the Indiana Wesleyan University Alumni Association mailing list, a stratified random sample of the graduates was achieved. The Indiana Wesleyan University Post Office computer program has software that randomly selects a sample population based on the total population size and sample parameters. Using the parameters of 2,095 total graduates, a 20% random sample, and the four majors under consideration for this study, the computer randomly selected 20% of each of the four majors out of the total list of 419 names, which were used to send the survey instrument.

A cover letter accompanied the initial questionnaire mailing (Appendix D). As noted from Appendix C the survey instrument had been designed to be a self-mailer. To make it easier for the graduates to respond and to increase the overall response rate, the questionnaire was return addressed and pre-stamped. Respondents simply had to complete the questionnaire, fold it in half, tape, and mail.

Similar research studies utilized a variety of follow-up mailings. Etherington (1980) sent a follow-up letter to nonrespondents after 2 weeks, a second questionnaire after 4 weeks, and a third mailing after 7 weeks (p. 47). Ainsworth and Morley (1995) sent a second mailing only after 2 weeks to "encourage those who have not yet responded

to do so" (p. 178). Pesulima (1990) followed the delivery of his questionnaires with personal phone calls after 1 and 3 weeks (p. 74). Geromel (1993) also made personal phone calls after few surveys were returned (he had only a sample size of 108) (p. 37).

Paranto and Champagne (1996) sent a follow-up survey to nonrespondents after 3 weeks (p. 14). Phillippi and Banta (1992) followed their initial mailing with a reminder postcard after 10 days. After another 10-day period, they sent a second questionnaire to nonrespondents (p. 7). Finally, Annis and Rice (1992) also sent a reminder postcard after 2 weeks of their first mailing and a second questionnaire after 2 additional weeks (p. 5).

The response rates from the above-mentioned research studies ranged from a low of 37% (Pesulima) to a high of 68% (Annis & Rice). Based on the projected sample size of 419, the use of a phone call follow-up was unrealistic. The research studies, which had the highest response rates, Phillippi and Banta (53%) and Annis and Rice (68%), utilized a follow-up postcard and second mailing. Therefore, to realize the highest response rates possible, it was decided to utilize both a follow-up postcard and second questionnaire mailing. The mailing schedule for the questionnaires and reminder postcards was as follows:

- 1. Initial mailing April 6, 1999
- 2. Reminder postcard sent to nonrespondents after 2 weeks April 22, 1999
- 3. Second questionnaire sent to nonrespondents after 4 weeks May 6, 1999

Also, the questionnaires were coded to allow for tracking of responses and to maintain respondent confidentiality. As mentioned above, the Indiana Wesleyan University Post Office software randomly selected the 419 names from the master alumni list from the years of 1996-1998. The names were segmented into four separate lists

based on the four majors being surveyed (B.S. in Business Administration, B.S. in Management, M.S. in Management, and Masters in Business Administration). Each of the four lists was coded with "1" for B.S. in Business Administration, "2" for B.S. in Management, "4" for M.S. in Management, and "5" for Master's in Business Administration. The graduates on the mailing lists were given a code number in consecutive order as their name appeared on this master list. For example, the first person appearing on the B.S. in Business Administration list was coded "11," the second person "12," and so on. These code numbers were also marked on the questionnaires so that as they were returned in the mail, the respondent's name could be crossed off the master mailing list. The reminder postcard (Appendix E) and second mailing (Appendix F) of the questionnaire were sent only to the names remaining on the list. The initial mailing generated an overall response rate of 30.5%. The response rate by individual majors is noted in Table 5.

Table 5

Initial Mailing Response Rate

Degree	# of Responses	Total Sent	% Responded
B.S. in Business Administration	41	162	25.3
B.S. in Management	29	77	37.6
M.S. in Management	20	58	34.4
Masters in Business Administration	38_	122	<u>31.1</u>
Totals	128	419	30.5

A reminder postcard was sent to all nonrespondents 2 weeks after the initial mailing. The postcard yielded an additional 44 questionnaires returned, which increased the response rate an additional 10.5%, for a total response rate to this point of 41%. The results are shown in Table 6.

Table 6

Reminder Postcard Response Rate

Degree	# of Responses	Total Sent	%Responded
B.S. in Business Administration	55	162	33.9
B.S. in Management	35	77	45.4
M.S. in Management	24	58	41.3
Masters in Business Administration	<u>58</u>	122	<u>47.5</u>
Totals	172	419	41.0

A second questionnaire was subsequently sent to the remainder of the nonrespondents on May 6, 1999. The final mailing yielded another 76 returned questionnaires for an overall response rate of just over 59%. The results are shown in Table 7.

Summary of Methodology

Using a survey instrument (see Appendix C), Indiana Wesleyan University

Business and Management alumni were asked to rate their perceptions on 10 different
issues known as the Ten Across using a 5-point Likert scale. They were asked how
important it was that Indiana Wesleyan University teaches these 10 skills and how much
progress they felt they had made while a student.

Table 7
Final Mailing Response Rate

Degree	# of Responses	Total Sent	% Responded
B.S. in Business Administration	80	162	49.4
B.S. in Management	55	77	71.4
M.S. in Management	35	58	60.3
Masters in Business Administration	<u>78</u>	122	<u>63.9</u>
Totals	248	419	59.2

An initial version of the survey instrument was developed and a series of pilot studies was undertaken. Graduates who participated in the pilot studies made several recommendations. The initial mailing generated an overall response rate of 30.5%. A reminder postcard was sent, which increased the overall response rate an additional 10.5%, for a total response rate at this point of 41%. Finally, a second questionnaire was sent and yielded a final overall response rate of 59%.

Once the surveys were returned, statistical analysis was conducted. The intention was to draw conclusions regarding the perceived levels of importance and progress made as related to the Ten Across skills. What the analysis showed is the similarities, differences, and interactions between majors and gender as perceived by the survey respondents. The responses showed patterns relative to the 10 life-skills based on graduates' perceptions of the importance of and their relative progress made in each of the skills.

A two-way Analysis of Variance (ANOVA) was utilized to test each of the stated hypotheses. This method of analysis determined if differences and interactions exist in the graduates' perceptions related to "majors" and "genders."

Research Questions to Be Answered, Hypotheses to Be Examined

Four major research questions were addressed in this study. The first of these questions was:

1. To what degree do Indiana Wesleyan University Business and Management graduates perceive the Ten Across skills as important?

On the original survey instrument, graduates were asked to rate the Ten Across statements using a 5-point Likert scale. For purposes of this analysis, the following criteria were used to determine the degree to which graduates perceived the Ten Across skills to be important. For the "importance" questions, the scale utilized was 1=Unimportant; 2=Of Little Importance; 3=Moderately Important; 4=Important; and 5=Very Important.

After the analysis was completed, if the overall mean scores ranged from 1.00-1.50, then the Ten Across skill was perceived as "unimportant." If the mean scores were between 1.51 and 2.50, the skills were perceived as "of little importance." A range of 2.51 to 3.50 equates to the skills being perceived as "moderately important." If the mean scores fell in a range of 3.51-4.50, the skills were perceived as "important." Finally, a ranking in the 4.51-5.00 range were perceived to be "very important."

The second research question under consideration in this study was:

2. What differences in perceived importance of the Ten Across skills are there

among Indiana Wesleyan University Business and Management graduates based on academic major and gender?

In developing appropriate hypothesis statements related to this question, there exist two independent variables: academic major and gender. The dependent variable is the degree of perceived importance of the Ten Across skill areas. To address this research question, the following three hypotheses were tested:

Hypothesis 1: There is no difference in the perceived importance of the Ten Across skills based on academic major.

Hypothesis 2: There is no difference in the perceived importance of the Ten Across skills based on gender.

Hypothesis 3: There is no interaction between academic major and gender in the perceived importance of the Ten Across skills.

A two-way Analysis of Variance (ANOVA) was utilized to test each of the above hypotheses. This method of analysis determined if differences and interactions exist in the graduates' perceptions related to majors and gender.

The third major research question in this study was:

3. To what degree do Indiana Wesleyan University Business and Management graduates perceive that they have shown progress in each of the Ten Across skills?

On the original survey instrument, graduates were asked to rate the Ten Across statements using a 5-point Likert scale. For purposes of this analysis, the following criteria was used to determine the degree to which graduates perceived that they had progressed in the Ten Across skills while students at Indiana Wesleyan University. For the "progress" questions, the scale utilized was 1=No Progress; 2=Little Progress;

3=Some Progress; 4=Considerable Progress; and 5=Very Significant Progress. After the analysis was completed, if the overall mean scores ranged from 1.00-1.50, then the perception is that there was "no progress" in the Ten Across skill. If the mean scores fell between 1.51 and 2.50, the perception is that there was "little progress" in the skill. A range of 2.51 to 3.50 equates to a perception of "some progress" made in the skill. If the mean scores ranged from 3.51-4.50, the perception is that there has been "considerable progress" made in the skill. Finally, a ranking in the 4.51-5.00 range was perceived as exhibiting "very significant progress" in a skill.

The fourth major research question in this study is:

4. What differences in perceived progress in the Ten Across skills are there among Indiana Wesleyan University Business and Management graduates based on academic major and gender?

In developing appropriate hypothesis statements related to this question, there exist two independent variables: academic major and gender. The dependent variable is the degree of perceived importance of the Ten Across skill areas. To address this research question, the following three hypotheses were tested:

Hypothesis 4: There is no difference in the perceived progress in the Ten Across skills based on academic major.

Hypothesis 5: There is no difference in the perceived progress in the Ten Across skills based on gender.

Hypothesis 6: There is no interaction between academic major and gender in the perceived progress in the Ten Across skills.

A two-way Analysis of Variance (ANOVA) was utilized to test each of the above hypotheses. This method of analysis determined if differences and interactions exist in the graduates' perceptions related to majors and gender.

Qualitative Data

Students were also asked to write additional comments on their survey forms that indicated how progress was demonstrated. The word-for word written comments are found in Appendix G.

There were a total of 222 written comments spread out among the Ten Across Skills. After the return of the survey instruments, for each of the 10 skills, common "themes" were identified and comments were categorized into one of the themes. The categorization into themes was completed to better determine how these qualitative comments would be analyzed and included in the findings and results of this study. Initially, all of the comments were either categorized into either negative or positive themes. After analyzing the comments more closely, a number of other, more specific themes arose. It was felt that these various themes could better corroborate the quantitative data by explaining why and how graduates responded to the survey. Below are listed the Ten Across Skills with their accompanying themes:

- 1. The ability to see things from the perspective of a Christian world view:
 - a. Growth as a Christian
 - b. Increased church attendance
 - c. Negative faculty issues
 - d. New ministries started

- e. Better decision making/new perspective
- f. Positive faculty issues
- g. Miscellaneous (negative)
- h. Miscellaneous (positive).
- 2. Skill in ethical thought and action
 - a. New approach to decision making/point of view
 - b. Awareness
 - c. Christian world view.
- 3. Values and skills necessary for lifelong learning:
 - a. New awareness/outlook/focus.
- 4. The ability to read complex materials with comprehension:
 - a. Increased reading skills
 - b. Workplace application
 - c. Better understanding/comprehension
 - d. Reading not stressed (negative).
- 5. Skill in thinking critically concerning ideas and performance:
 - a. Made progress/increased skill
 - b. Made little progress.
- 6. Skill in problem solving and making decisions:
 - a. Better decision making/problem solving skills
 - b. Skills still lacking (negative).
- 7. The ability to communicate effectively through writing:
 - a. Better skills/ability

- b. Helpful/effective
- c. Improvement.
- 8. The ability to communicate effectively orally:
 - a. Better skills/ability
 - b. Helpful/effective
 - c. Improvement
 - d. More confidence/comfortableness/less fear.
- 9. The ability to find needed information (information literacy):
 - a. Increase usage of library
 - b. Made little progress.
- 10. The ability to work effectively in teams:
 - a. Workplace application
 - b. Improvement
 - c. Teams not working (negative)
 - d. Strength/best part of program.

CHAPTER IV

RESULTS

The overall purpose of this study was to determine the perceived attitudes of Adult and Professional Studies Business and Management graduates regarding the importance of and their progress in the Ten Across areas. The intention of the study was to find how important it is that Indiana Wesleyan University develops these qualities in its graduates, based on its graduates' perceptions, and also to show what level of progress graduates made in each of the skill areas.

Using a survey instrument (see Appendix C), Indiana Wesleyan University

Business and Management graduates were asked to rate their perceptions on 10 different
issues known as the Ten Across using a 5-point Likert scale. They were asked how
important it was that Indiana Wesleyan University teaches these 10 skills and how much
progress they felt they had made while a student. The 10 life-skills, known as the Ten
Across are,

- 1. The ability to see things from the perspective of a Christian worldview
- 2. Skill in ethical thought and action
- 3. Values and skills necessary for lifelong learning
- 4. The ability to read complex materials with comprehension
- 5. Skill in thinking critically concerning ideas and performance

- 6. Skill in problem solving and making decisions
- 7. The ability to communicate effectively through writing
- 8. The ability to communicate effectively orally
- 9. The ability to find needed information (information literacy)
- 10. The ability to work effectively in teams

The survey was sent to a stratified random sample of all graduates from 1996 through 1998 (the stratified random sample was based on the four majors under consideration). The sample size was 419, and 248 surveys were returned for a response rate of 59%. Table 8 shows the total number of respondents for the two demographic variables represented in the survey.

Table 8
Survey Demographic Results

		Gender				
Degree	# of Respondents	Male	Female			
Bachelor of Science in Business Administr	80 ration	36	44			
Bachelor of Science in Management	55	27	28			
Master of Science in Management	35	17	18			
Master of Business	<u>78</u>	<u>57</u>	21			
Total	248	137	111			

Data results from the 248 useable surveys were analyzed utilizing the software programs "SPSS" and "Stataquest." A two-way Analysis of Variance was completed for the two independent variables: major and gender and the two dependent variables: importance and progress.

Research Question 1

Four major research questions were addressed in this study. The first of these questions was:

1. To what degree do Indiana Wesleyan University Business and Management graduates perceive the Ten Across skills as important?

On the original survey instrument, graduates were asked to rate the Ten Across statements using a 5-point Likert scale. For the "importance" questions, the scale utilized was 1=Unimportant; 2=Of Little Importance; 3=Moderately Important; 4=Important; and 5=Very Important. For purposes of this analysis, the following criteria were used to determine the degree to which graduates perceived the Ten Across skills to be important. If the overall mean scores ranged from 1.00-1.50, then the Ten Across skill was perceived as "unimportant." If the mean scores were between 1.51 and 2.50, the skills were perceived as "of little importance." A range of 2.51 to 3.50 equates to the skills being perceived as "moderately important." If the mean scores fell in a range of 3.51-4.50, the skills were perceived as "important." Finally, a ranking in the 4.51-5.00 range were perceived to be "very important."

When using the criteria established above to determine the degree of perceived importance, Table 9 indicates that for the overall mean scores for the Ten Across skills, all

10 factors were perceived to be either "very important" or "important" by all of the graduates. There were four skills perceived by graduates to be "very important." Listed with descending mean scores, they include: Problem Solving (4.61), Oral Communications (4.60), Writing Effectively (4.57), and Ethics (4.50). The other six skills were all perceived to be "important," including: Teamwork (4.48), Lifelong Learning (4.45), Critical Thinking (4.39), Reading Materials (4.33), Information Literacy (4.30), and Christian World View (4.04). These data are summarized in Table 9.

Table 9

Importance Ouestions – Degree of Perceived Importance

	Overall Mean	Degree of
	Scores	Importance
Skill		- -
Skill1-Christian World View	4.04	Important
Skill 2-Ethics	4.50	Very Important
Skill 3-Lifelong Learning	4.45	Important
Skill 4-Reading Materials	4.33	Important
Skill 5-Critical Thinking	4.39	Important
Skill 6-Problem Solving	4.61	Very Important
Skill 7-Writing Effectively	4.57	Very Important
Skill 8-Oral Communications	4.60	Very Important
Skill 9-Information Literacy	4.30	Important
Skill 10-Teamwork	4.48	Important

Research Question 2

The second research question under consideration in this study was:

2. What differences in perceived importance of the Ten Across skills are there among Indiana Wesleyan University Business and Management graduates based on

academic major and gender?

In developing appropriate hypothesis statements related to Question 2, there exist two independent variables: academic major and gender. The dependent variable is the degree of perceived importance of the Ten Across skill areas. To address this research question, the following three hypotheses were tested:

Hypothesis 1: There is no difference in the perceived importance of the Ten Across skills based on academic major.

A two-way analysis of variance was used to test for significant differences among the majors for the 10 "importance" questions. As seen in Table 10, there were no significant differences among the four majors tested, utilizing a significance level of .05. Therefore, Null Hypothesis 1 was retained.

Hypothesis 2: There is no difference in the perceived importance of the Ten Across skills based on gender.

A two-way analysis of variance was used to test for significant differences between males and females for the 10 "importance" questions. As seen in Table 11, there was a significant difference indicated for "importance" question 8, Oral Communication, with an F-ratio of 10.44 and a probability of .001. The Mean Score for female respondents was significantly higher (4.75) than for male respondents (4.49). Furthermore, there was also a significant difference indicated for "importance" question 10, Team Building, with an F-ratio of 11.95 and a probability of .001. The Mean Score for females was significantly higher (4.62) than for males (4.36). Therefore, Null Hypothesis 2 was rejected for skills 8 and 10.

Table 10

ANOVA for Hypothesis 1

	BS	BA .	BS	M	MSI	M	MB	A			
	M	SD	M	SD	M	SD	M	SD	df	F	p
Skill 1	4.09	1.05	4.05	.91	A 15	.93	3.93	1 10	3	.11	.952
					4.15			1.12	_		
Skill 2	4.43	.61	4.44	.77	4.71	.46	4.51	.71	3	1.73	.162
Skill 3	4.44	.66	4.37	.78	4.50	.71	4.50	.74	3	.54	.655
Skill 4	4.39	.65	4.34	.85	4.15	.78	4.34	.76	3	.74	.527
Skill 5	4.29	.76	4.48	.64	4.32	.64	4.45	.60	3	1.33	.265
Skill 6	4.65	.51	4.65	.55	4.35	.73	4.66	.60	3	2.53	.058
Skill 7	4.53	.62	4.65	.52	4.62	.65	4.53	.62	3	.50	.685
Skill 8	4.57	.57	4.74	.59	4.59	.66	4.54	.65	3	1.03	.378
Skill 9	4.37	.66	4.28	.76	4.15	.86	4.31	.79	3	.74	.530
Skill 10	4.37	.72	4.55	.63	4.35	.85	4.59	.64	3	1.88	.132

<u>Note</u>: BSBA = Bachelor of Science in Business Administration; BSM = Bachelor of Science in Management; MSM = Master of Science in Management; MBA = Master of Business Administration.

Table 11

ANOVA for Hypothesis 2

	Female		Ma	<u>le</u>			
	M	SD	M	SD	df	F	p
<u>Skill</u>							
Skill 1	4.07	.98	4.02	1.06	1	.14	.707
Skill 2	4.58	.58	4.43	.72	1	3.20	.075
Skill 3	4.56	.65	4.37	.76	1	3.22	.074
Skill 4	4.35	.69	4.31	.80	1	.00	.979
Skill 5	4.46	.68	4.33	.66	1	2.70	.102
Skill 6	4.67	.57	4.57	.61	1	1.18	.278
Skill 7	4.65	.52	4.50	.66	1	2.48	.117
Skill 8	4.75	.50	4.49	.67	1	10.44	.001*
Skill 9	4.37	.76	4.24	.75	1	1.77	.185
Skill 10	4.62	.61	4.36	.75	1	11.95	.001*

^{*}p < .05.

Hypothesis 3: There is no interaction between academic major and gender in the perceived importance of the Ten Across skills.

A two-way analysis of variance was used to test for interaction between the majors and gender for the 10 "importance" questions. As seen in Appendix H there were no significant interactions indicated between majors and gender for each of the 10 "importance" questions, utilizing a significance level of .05. Therefore, Null Hypothesis 3 was retained.

Research Question 3

The third major research question in this study was:

3. To what degree do Indiana Wesleyan University Business and Management graduates perceive that they have shown progress in each of the Ten Across skills?

On the original survey instrument, graduates were asked to rate the Ten Across statements using a 5-point Likert scale. For the "progress" questions, the scale utilized was 1=No Progress; 2=Little Progress; 3=Some Progress; 4=Considerable Progress; and 5=Very Significant Progress. For purposes of this analysis, the following criteria were used to determine the degree to which graduates perceived that they had progressed in the Ten Across skills while students at Indiana Wesleyan University. If the overall mean scores ranged from 1.00-1.50, then the perception is that there was "no progress" in the Ten Across skill. If the mean scores fell between 1.51 and 2.50, the perception is that there was "little progress" in the skill. A range of 2.51 to 3.50 equates to a perception of "some progress" made in the skill. If the mean scores ranged from 3.51-4.50, the perception is that there has been "considerable progress" made in the skill. Finally, a

ranking in the 4.51-5.00 range was perceived as exhibiting "very significant progress" in a skill.

When using the criteria established above to determine the level of perceived progress, Table 12 indicates that for the overall mean scores for the Ten Across skills, all 10 factors were perceived experiencing "considerable" or "some" progress by all of the graduates. Eight of the skills were perceived as evidencing "considerable progress." The skills are listed with descending mean scores: Teamwork (4.02), Writing Effectively (3.98), Oral Communications (3.95), Problem Solving (3.78), Lifelong Learning (3.77), Critical Thinking (3.70), Information Literacy (3.64), and Ethics (3.50). The other two skills were perceived as showing "some progress," and included: Reading Materials (3.45) and Christian World View (3.22). These data are summarized in Table 12.

Table 12

Progress Questions – Degree of Perceived Progress

	Overall Mean	Level of
	Scores	Progress
<u>Skill</u>		.
Skill1-Christian World View	3.22	Some Progress
Skill 2-Ethics	3.50	Considerable Progress
Skill 3-Lifelong Learning	3.77	Considerable Progress
Skill 4-Reading Materials	3.45	Some Progress
Skill 5-Critical Thinking	3.70	Considerable Progress
Skill 6-Problem Solving	3.78	Considerable Progress
Skill 7-Writing Effectively	3.98	Considerable Progress
Skill 8-Oral Communications	3.95	Considerable Progress
Skill 9-Information Literacy	3.64	Considerable Progress
Skill 10-Teamwork	4.02	Considerable Progress

Research Question 4

The fourth major research question in this study is:

4. What differences in perceived progress in the Ten Across skills are there among Indiana Wesleyan University Business and Management graduates based on academic major and gender?

In developing appropriate hypothesis statements related to Question 4, there exist two independent variables: academic major and gender. The dependent variable is the degree of perceived progress of the Ten Across skill areas. To address this research question, the following three hypotheses were tested:

Hypothesis 4: There is no difference in the perceived progress in the Ten Across skills based on academic major.

A two-way analysis of variance was used to test for significant differences among the majors for the 10 "progress" questions. As seen in Table 13, there was a significant difference for "progress" skill 1, Christian World View, with an F-ratio of 2.49 and a probability of .049. Therefore, Null Hypothesis 4 was rejected for skill 1.

The results of the post hoc Student-Newman-Keuls test for the "progress" skill one, Christian World View, with a significance of .05, indicated that the MBA graduates mean score was significantly lower than the mean scores for the other majors. These data are summarized in Table 14.

Hypothesis 5: There is no difference in the perceived progress in the Ten Across skills based on gender.

A two-way analysis of variance was used to test for significant differences between males and females for the 10 "progress" questions. As seen in Table 15 below, there was

Table 13

ANOVA for Hypothesis 4

	BS	<u>BA</u>	BS	M	MS	\mathbf{M}	ME	<u>BA</u>			
	M	SD	M	SD	M	SD	M	SD	df	F	p
Skill									_		
Skill 1	3.36	.93	3.35	.97	3.41	.89	2.89	.88	3	2.49	.049*
Skill 2	3.44	.98	3.69	.95	3.50	.96	3.43	.95	3	.89	.447
Skill 3	3.76	.89	3.91	.83	3.88	.88	3.63	.80	3	.96	.410
Skill 4	3.35	.86	3.60	.77	3.41	.93	3.47	.92	3	.83	.478
Skill 5	3.63	1.00	3.76	.70	3.73	.84	3.72	.84	3	.24	.867
Skill 6	3.64	.98	3.93	.77	3.68	.88	3.85	.78	3	1.57	.197
Skill 7	3.95	.87	4.09	.87	4.06	1.07	3.91	.79	3	.33	.804
Skill 8	4.09	.74	3.96	.78	3.85	.99	3.84	.86	3	.69	.557
Skill 9	3.63	1.08	3.72	.79	3.50	.96	3.65	.94	3	.48	.694
Skill 10	3.92	1.05	4.09	.84	4.12	.84	4.04	.83	3	.64	.590

^{*}p<.05.

Table 14

Student-Newman-Kuels Test With Significance of .05

Major	N	1	2	
MBA	76	2.89*		
BSM	55		3.35	
BSBA	75		3.36	
MŠM	35		3.41	
Sig.		1.000	.975	
•				

<u>Note</u>: Means for groups in homogeneous subsets are displayed: a. Uses Harmonic Mean Sample Size = 54.612 and b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type 1 error levels are not guaranteed. BSBA = Bachelor of Science in Business Administration; BSM = Bachelor of Science in Management; MSM = Master of Science in Management; MBA = Master of Business Administration

^{*}Indicates significant difference.

a significant difference indicated for "progress" question 10, Teamwork, with an *F*-ratio of 8.81 and a probability of .003. The Mean Score for female respondents was significantly higher (4.19) than for male respondents (3.90). Therefore, Null Hypothesis 5 was rejected for skill 10.

Table 15

ANOVA for Hypothesis 5

	Fer	nale	Ma	<u>le</u>			
	M	SD	M	SD	df	F	p
Skill							
Skill 1	3.40	.97	3.08	.89	1	3.19	.075
Skill 2	3.53	1.03	3.48	.91	1	.00	.949
Skill 3	3.88	.88	3.68	.82	1	1.20	.274
Skill 4	3.42	.95	3.48	.81	1	.08	.778
Skill 5	3.69	.94	3.71	.80	1	.06	.811
Skill 6	3.79	.92	3.76	.83	1	.22	.638
Skill 7	4.04	.96	3.94	.81	1	.45	.504
Skill 8	4.08	.87	3.85	.77	1	2.63	.106
Skill 9	3.61	1.00	3.66	.92	1	.04	.832
Skill 10	4.19	.96	3.90	.85	1	8.81	.003*

p < .05.

Hypothesis 6: There is no interaction between academic major and gender in the perceived progress in the Ten Across skills.

A two-way analysis of variance was used to test for interaction between the majors and gender for the 10 "progress" questions. As seen in Appendix H there were no significant interactions indicated between majors and gender for each of the 10 "progress" questions, utilizing a significance level of .05. Therefore, Null Hypothesis 6 was retained.

Analysis of Qualitative Data

Students were also asked to write additional comments on their survey forms that indicated how progress was demonstrated. The word-for-word written comments are found in Appendix G. There were a total of 222 written comments spread out among the Ten Across Skills. For each of the 10 skills, common "themes" were identified and comments were categorized into one of the themes. The analysis of these qualitative comments is relevant as supported by research by Ravid and Roth (1995) who found that this format "allowed quantitative and qualitative data to be integrated and synthesized to yield a more complete understanding of respondents' perceptions" (p. 8).

The first Ten Across skill that was included on the survey form was "The ability to see things from the perspective of a Christian World View." This skill received the highest number of comments at 51. The common theme that received the most comments was that of "Growth as a Christian." There were 18 comments by graduates that indicated how they had perceived their growth as a Christian while a student at Indiana Wesleyan University. Among these actual comments included: "I got to know Christ better"; "Helped bring me closer to Christ"; "Improved knowledge of Christ"; and "IWU opened my eyes again." There were two graduates who stated that their "Church Attendance" had changed: "My children and I have joined a new church" and "Attend church regularly." There were 8 comments related to "Better decision making/having a new perspective." Among these comments were: "Being able to see things from a Christian world view makes it easier to make decisions" and "I now base business decisions on a Christian perspective."

Along with these very positive comments, this Christian world-view skill also received the highest number of comments which could be considered negative. The theme which received the majority of these types of comments related to "Faculty." Among these 10 comments were: "IWU needs to do a better job of insuring its instructors share its Christian values"; "Integration of faith in the classroom was relatively sporadic"; "IWU needs to make sure facilitators focus on this. It was hit or miss"; "Very few professors made a tie with Christian values during instruction"; and "Only 40 to 50% of professors started class with prayer-could be improved." There were 4 additional comments that could be considered as negative, but more from a generic sense, including: "I felt IWU was surprisingly weak here" and "The Christian worldview was never a part of our classes."

To somewhat counter these negative issues, there were 5 positive comments listed related to "Faculty." Included were: "Two specific instructors had a strong effect on my Christian maturity"; "Our best instructors start with devotions"; and "The facilitators helped us think like Christians." Probably the one comment which best sums up the Christian world-view skill was: "An atheist was won over to Christ."

The next skill that was included on the survey was "Skill in ethical thought and action" which garnered 14 total comments. Half of the comments were under the theme of "Decision making/point of view." Some of these comments included: "I see things from a different point of view"; "The tools introduced provided me new approaches in ethical thinking and analysis"; and "I evaluate situations from an ethical position prior to acting." There were also 5 comments which related to a "Christian world view" under this

ethics skill. Included were: "Now have a Christian world view" and "It reinforced my Christian beliefs."

The third skill on the survey was "Values and skills necessary for lifelong learning." There were 11 total comments and all related to the overall theme of "New awareness/outlook/focus." Some of these comments included: "IWU has the only program that addresses values"; "IWU instilled in me the need for continued education"; "I have learned how to learn"; and "The program made this goal very important and gave skills needed to make it happen."

"The ability to read complex materials with comprehension" was the next skill under consideration. There were 15 total comments given by graduates with the majority (8) under the theme of "Better understanding/comprehension." Included were: "I read now with more understanding"; "Can now comprehend complex and involved material"; and Reading has become more enjoyable and understandable." For this skill there were two negative comments: "IWU fell short" and "In many cases, reading of material was not stressed."

The fifth of the Ten Across skills was "Thinking critically concerning ideas and performance." Of the total of 14 comments made, 12 were under the theme of "Made progress/increased skill." Included were: "It was so obvious in my work environment that significant progress has been made"; "A lot of progress here"; and "Increased ability to analyze true problems." There were also 2 negative comments under the theme of "Made little progress." Included were: "Not much progress" and "This wasn't stressed."

The sixth of the skills was "Problem solving and making decisions." There were 14 total comments with 11 categorized into the positive theme of "Better decision

making/problem solving skills." Some of these comments included: "Confidence to feel comfortable making decisions"; "I have grown a lot here"; "There is no problem I can't solve"; and "Has improved 100%." There were also 3 negative comments themed under "Skills still lacking," including: "This is an area lacking because of low class participation" and "This area needs more attention."

Skill number 7, "The ability to communicate effectively through writing" received the third highest number of written comments (28). Over half of the comments (15) were under the theme of "Helpful/effective" and included: "My effectiveness. . . was incredible"; "This is my weakest skill and the writing assignments have helped me improve on this"; "TWU does an excellent job on this", "Writing used to scare me-love it now"; and "The program helped me overcome my phobia about writing." Some comments also dealt with "General improvement" (7) and included: "I feel much improved in this area"; "I've definitely improved"; and "I have improved significantly." Finally, there were also 6 comments under the theme of "Better skills/ability." Some of these comments included: "Assignments sharpened written communication skills"; "My writing skills are more disciplined"; and "Ability in this area has improved dramatically."

The skill of "The ability to communicate effectively orally" received the most number of total comments (40). The theme with the most of these comments (17) dealt with "More confidence/comfortableness/less fear." Some of the more salient of these comments were: "Went from being afraid of speaking in front of people to enjoying it"; "I feel more confident each time I have to prepare and deliver presentations"; "Speaking to a group no longer bothers me"; "My level of comfort is very high"; "Gave me more confidence"; "I am more at ease in front of a group"; and "Helped me get comfortable in

front of a group." Another theme, "Improvement," received 11 comments including:

"Great gains here"; "This area is where I'm most improved"; "IWU does an excellent job
of this"; "The most important part of my success to date"; and "Strong part of the
program."

The next skill reviewed was "The ability to find needed information (information literacy)." This skill related to the ability to conduct research and received a total of 10 comments. Most (9) were under the theme of "Increase library usage" and included: "I now use the library and internet frequently"; "I'm no longer afraid of libraries or the internet"; "Continued use improved my skills"; and "Gave me the opportunity to do extensive research." There was also 1 negative comment: "Not significant progress made here."

The last of the Ten Across skills included on the survey was "The ability to work effectively in teams." This particular skill related to Indiana Wesleyan's use of study groups in every cohort group. In nearly every course, at all levels of instruction from associate degrees through and including master's degrees, study groups (or teams) are used for in-class and out-of-class assignments. There were 25 total comments categorized into a number of themes. The most comments (9) came under the theme of "Strength/best part of the program." Included were comments such as: "One of the most powerful things I learned at IWU"; "A strength of the program"; "Learning team dynamics has been one of the greatest benefits of the IWU program"; "Team involvement was of great benefit during the program"; "This had to be the most important aspect of the program"; and "Best part of the program." There were also 7 comments related to "Workplace applications," including: "Joined 2 new team committees"; "I have used what I learned at

IWU in my daily dealings at work"; "I learned to negotiate in a group"; and "Learned more about team building to use in current position."

There were 6 additional comments related to overall "Improvement," including: "Learned more through this concept then at traditional college"; "Good progress here"; and "Helped me understand the whole is more than the sum of its parts." There were also 3 comments included that could be considered as negative: "The educational value of teaming is overrated"; "Our study group was not able to do this effectively"; and "Our team did not function well."

Summary of Chapter 4

Chapter 4 presented the data and the results of the data analysis. Chapter 5 summarizes these results and offers conclusions and recommendations.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The overall purpose of this study was to determine the perceived attitudes of Adult and Professional Studies Business and Management graduates regarding the importance of and their progress in the Ten Across areas. The intention of the study was to find how important is it that Indiana Wesleyan University develops these qualities in its graduates, based on its graduates' perceptions, and also to show what level of progress graduates made in each of the skill areas, again based on graduates' perceptions. The study specifically focused on Business and Management graduates and did not deal with Adult and Professional Studies Education or Nursing graduates. The Nursing and Education programs have recently been reaccredited by their respective governing bodies and graduates of those programs were surveyed for these accreditation visits. Because there has never been an extensive survey completed of Business and Management graduates, it was decided that this study was necessary.

Theoretical Basis for Study

Students in the Indiana Wesleyan's Adult and Professional Studies (APS) programs are working adults and bring to the classroom significant skills and work experiences from which to draw. Indiana Wesleyan has purposely formatted its

curriculum to be accelerated, emphasizing interaction among participants. The use of study or cohort groups plays an important role in the learning process. Principles of adult education have been incorporated into the development of the IWU adult programs. The following are the foundational adult education elements that make APS programs work:

- 1. Adult students are motivated to learn.
- 2. Adults have learned discipline.
- 3. Adults have broad life experiences.
- 4. Adults desire relevance.
- 5. Adults have developed skills in independent learning.
- 6. Adults learn best when they are personally involved.
- 7. Adults have many insights of their own.
- 8. Adults can direct their learning to fill in gaps in their knowledge.
- 9. Adults learn well in groups (IWU, 1997, pp. 7-8).

These foundational elements are inherent to the principles of adult education. As was noted in Chapter 2, research found that adult education principles revolve around such concepts as students experience instruction that is problem centered and self-directed and the application of instruction in the workplace (Knowles, 1990, the Zemkes [Jones, 1982], Galbo, 1998, and Merriam, 2001). The theory of adult education formed the basis for this study, and the results show that Indiana Wesleyan's Adult and Professional Studies programs are designed to and model this theory.

Importance/Significance of the Study

The relevance of alumni research to administrative decision making has been recognized for some time (Delaney, 1995, p. 4). Alumni research "has assumed increasing importance for its potential contribution to outcomes assessment" (Pike, 1990, p. 3). Alumni surveys have been found to "provide a basis for evaluating how well the knowledge and skills developed through the educational program relate to the knowledge and skills required in the workplace" (Jennings, 1989, p. 440). Williford and Moden (1989) observed that a unique feature of alumni surveys, as compared to enrolled students, is the capability of "documenting students' assessment of the quality of their educational experience" (p. 6). The use of alumni surveys is such a functional part of an assessment effort that some states are even requiring them (Astin, 1991).

When this study was first suggested to Adult and Professional Studies administration, Dr. David Wright, then Vice President and Dean of Adult and Professional Studies, felt the outcome of the study would place Indiana Wesleyan University into a "win-win" situation. He said, "If we find that we are doing a good job, and receive positive results, we win. If, on the other hand, there are areas that we need to work on based on the survey, we also win because we have time to make changes" (personal communication, April 17, 1997).

The North Central Association of Colleges and Schools (NCA) accredits Indiana
Wesleyan University's Adult and Professional Studies programs. In February of 1998
NCA conducted a focused site visit. The purpose of this focused evaluation was to review
a request for the approval of the newly redesigned Master of Business Administration
program to be offered in an on-line format. One of the areas that the evaluation team

specifically mentioned as needing improvement was the assessment of student achievement. They felt that "progress in implementing the plan for the assessment of student academic achievement within the Adult and Professional Studies Division is a concern" (Grossman & Trussell, 1998, p. 9). Furthermore, the use of alumni surveys is an acknowledged assessment method that the North Central Association of Colleges and Schools recommends and encourages.

The results of this study are important, especially in the future development of curriculum. If a particular skill was found to be weak, in other words, if the graduates felt they experienced little or no progress, through the curriculum development process, courses can be redesigned to emphasize that specific area of perceived weakness. If, for example, oral communication skills (#8 of the Ten Across) is an area that graduates identify as having shown little or no progress, then future courses can be redesigned to emphasize or bolster this skill with exercises, tests, etc. There have been many criticisms of U.S. graduate management education, including Merritt (2001), Eberhardt and Moser (1997), Brody and Coulter (2002), Cudd and King (1995), and Richards-Wilson (2001). This criticism has focused on, among other issues, "curriculum inadequacy" (Petrick et al., 2001, p. 3). Addressing curriculum inadequacies is a prominent goal of this research.

Related Literature

The literature review was organized around four general areas: Theoretical Constructs of Adult Learning, Requisite Skills for Business and Management School Graduates, Graduate Surveys of Business and Management Programs, and Graduate Surveys of Other Academic Disciplines.

The concept of andragogy is defined as "the art and science of helping adults learn" (Craig, 1990, p. 121), in other words, "facilitation." All of the Indiana Wesleyan University Adult and Professional Studies programs are founded on adult education principles, and courses are "facilitated" as opposed to "taught." Adult education principles revolve around such concepts as the students' experience, instruction that is problem centered and self-directed, and the application of instruction in the workplace. These concepts are foundational to all Adult and Professional Studies curriculum and are overtly considered when instructing in the classroom.

A number of research studies examine which skills are required for graduates of business and management programs. There exists a body of research that recommends specific skills to be taught in business programs. It is the linking of the skills to the Ten Across that forms the foundation of this research.

Business schools are expected to develop curriculum around what is often called the "common body of knowledge." This "body" covers five major functional areas, including: (a) production, marketing, and finances; (b) economics, legal, and ethics; (c) accounting, quantitative methods, and information systems; (d) organizational theory, behavior, and interpersonal communications; and (e) administrative processes, analysis, and policy (Porter & McKibbon, 1988, p. 59). Courses in most business programs are developed using this "common body" as a guide. Indiana Wesleyan University's Business and Management programs include courses which cover the "common body of knowledge."

The Porter and McKibbon (1988) study found that "the curriculum should emphasize the development of various skills and personal characteristics" (p. 71). Their

research identified nine particular skills and personal characteristics, which included:

Analytical; Computer; Decision Making; Initiative; Leadership/interpersonal skills; Oral communications; Planning/organizing; Risk taking; and Written communications. Their list of nine skills and personal characteristics compares very favorably to Indiana Wesleyan University's Ten Across.

There also exists a body of literature specifically covering perceptions/attitudes of graduates of business and management programs from other colleges and universities.

There has been significant research undertaken that has examined business school graduates' perceptions of the quality of their education.

One study, Annis & Rice, 1992-probably more than any of the others cited, has the most direct relevance to this Indiana Wesleyan University study. It examined qualities inherent in business programs much like the Adult and Professional Studies' Ten-Across. It asked graduates how important they felt certain qualities were and also their level of preparation within each of the areas. The methodology for conducting their survey also served as a model for this Indiana Wesleyan University research. But probably the most salient issue is the fact that the Annis and Rice study was conducted at a Christian institution and brought in the factor of Christian higher education.

Paranto and Champagne (1996) identified skills that community leaders in business felt were necessary in preparing students, including: critical thinking skills, communication skills, and interpersonal skills. Among their conclusions, they related that "graduates of higher education programs are lacking in good communication skills—oral, written, and listening—which are necessary to be effective in their jobs" (p. 30). Their research is relevant to this Indiana Wesleyan University study because their recommendations go to

the heart of the Adult and Professional Studies learning methodologies. Adult and Professional Studies programs are built on collaborative learning activities (study groups), integrate writing assignments and oral presentations in all classes, and communications and critical thinking are part of the Ten Across life-skills.

Finally, there are also similar studies related to varying academic disciplines, including Rose and Mohapatra (1995) and King et al. (1996). Among other "majors," graduates from a Master of Public Administration degree program were surveyed relative to their perceptions of what is important in their careers and how an MPA contributes to their careers. As with the business programs that were analyzed, key skills were identified and assessed.

Methodology

Using a survey instrument (see Appendix C), Indiana Wesleyan University

Business and Management alumni were asked to rate their perceptions on 10 different
issues known as the Ten Across using a 5-point Likert scale. They were asked how
important it was that Indiana Wesleyan University teaches these 10 skills and how much
progress they felt they had made while a student.

An initial version of the survey instrument was developed and a series of pilot studies were undertaken. Indiana Wesleyan graduates who participated in the pilot studies made several recommendations.

The initial mailing generated an overall response rate of 30.5%. A reminder postcard was sent and increased the overall response rate an additional 10.5%, for a total

response rate at this point of 41%. Finally, a second questionnaire was sent and yielded a final overall response rate of 59%.

Once the surveys were returned, statistical analysis was conducted. The intention was to draw conclusions regarding the perceived levels of importance and progress made as related to the Ten Across skills. What the analysis showed is the similarities, differences, and interactions between majors and gender as perceived by the survey respondents. The responses showed patterns relative to the 10 life-skills based on graduates' perceptions of the importance of and their relative progress made in each of the skills.

A two-way Analysis of Variance (ANOVA) was utilized to test each of the stated hypotheses. This method of analysis determined if differences and interactions exist in the graduates' perceptions related to "majors" and "genders." This analysis method compared the data to determine if, for example, Master of Business Administration graduates perceive a particular Ten Across skill as more or less important as a specific undergraduate major and also compared the responses of graduates from a gender difference.

Summary of Findings

Graduates were asked to rate the Ten Across skills in two ways. First they were asked to rate the various skills as to their perceptions of the importance of Indiana Wesleyan University teaching the skills. Next, they were asked their perceptions as to their level of progress in each of the 10 areas while students at Indiana Wesleyan.

Four major research questions were addressed in this study. The first of these questions was:

1. To what degree do Indiana Wesleyan University Business and Management graduates perceive the Ten Across skills as important?

When using the criteria established to determine the degree of perceived importance, all 10 skills were perceived to be either very important or important by all of the graduates. There were 4 skills perceived by graduates to be "very important." Listed with descending mean scores, they include:

- Problem Solving was perceived by graduates as the most important of the Ten
 Across skills (Mean Score = 4.61)
 - 2. Oral Communication (Mean Score = 4.60)
 - 3. Writing Effectively (Mean Score = 4.57)
 - 4. Ethics (Mean Score = 4.50).

The other 6 skills were all perceived to be "important," and are included in descending mean scores:

- 5. Teamwork (Mean Score = 4.48)
- 6. Lifelong Learning (Mean Score = 4.45)
- 7. Critical Thinking (Mean Score = 4.39)
- 8. Reading Materials (Mean Score = 4.33)
- 9. Information Literacy (Mean Score = 4.30)
- 10. Christian World View was perceived by graduates as the least important of the Ten Across skills (Mean Score = 4.04).

A number of studies were included in the Review of Literature that focused on business programs and the perceptions of graduates, business leaders, and current students. Certain skills were noted as important or were ones that graduates felt were necessary for success after graduation. Annis and Rice (1992) found that interpersonal communications and oral communications were seen as important. Ainsworth and Morley (1995) also saw the need for more interpersonal education in business schools. Of particular interest was the research by Paranto and Champagne (1996). Among their findings was that graduates were lacking in oral and written communication skills.

Pesulima (1990) also found that communication skills were ranked as the most important skill business school graduates could attain. Tilley (1992) saw a need for more "soft skill" education in business schools, especially a strong emphasis on written and oral communication and teamwork. Jenkins and Reizenstein's (1984) research found that MBA graduates did not possess satisfactory skills in oral and written communication.

The Aiken et al. study (1994) found that the ability to communicate was the most important skill for business school graduates, and Schmidt (1991) felt that the main benefits of business school education were teamwork, and oral and written communication.

Cudd and King (1995) felt that MBA programs needed to restructure to emphasize "soft" (qualitative) skills over more "hard" (quantitative) skills. Ulinski and O'Callaghan (2002) determined that oral communications skills needed to be more emphasized in MBA curriculum. Cyphert (2002) also found that communication skills needed to better integrated throughout MBA curriculum. Finally, Richards-Wilson (2002) examined the

needs of students in today's business schools and the required emphasis on interpersonal skills and teambuilding.

The theme that pervades all of these noted studies is the area of communications. Whether written or oral, these abilities have been found to be the most important for graduates of business schools. What the findings for this study show is that oral and written communications skills were perceived as "very important" and were the second and third highest rated of the 10 skills. It shows that Indiana Wesleyan University is emphasizing the skills that have been found to be of the most benefit to students. As reported in the above cited research studies, communications skills were deemed the most important, and the results of this study indicate that graduates of Indiana Wesleyan's Business and Management programs perceive these same skills as "very important" and among those that were the highest rated.

Of note is the very close range of mean scores among the highest rated skills. Problem Solving had a mean score of 4.61, Oral Communication 4.60, and Writing Effectively was 4.57. These very close mean scores indicate general agreement of graduates of the relative importance of these top three rated skills.

There were also written comments made by graduates that further support these findings. Of particular note were the following comments made under each of the top three rated Ten Across Skills:

- 1. Problem Solving "There is no problem I can't solve."
- 2. Oral Communications "The most important part of my success to date."
- 3. Written Communications "The program helped me overcome my phobia about writing."

The Christian World View skill was perceived as the lowest rated of the Ten Across skills. Its mean score of 4.04 indicates that graduates found Christian World View to be the least important skill to be taught by Indiana Wesleyan. It was, however still perceived to be in the "important" category along with the other five skills.

There were also written comments that tend to support this finding. Some of the more salient comments included: "The Christian World View was never a part of our classes"; "I felt IWU was surprisingly weak here"; and "Integration of faith was relatively sporadic." Probably what is most interesting about the comparison of the quantitative results and the qualitative comments is the fact that even though the skill related to Christian World View was perceived by graduates as the least important, it received the highest number of written comments. While students did not feel this skill to be as important the others under consideration, they still were willing to make comments which evidence a desire on the graduates' part to explain their respective ratings.

The second research question under consideration in this study was:

2. What differences in perceived importance of the Ten Across skills are there among Indiana Wesleyan University Business and Management graduates based on academic major and gender?

To address this research question, three hypotheses were tested using a two-way analysis of variance (ANOVA).

Hypothesis 1: There is no difference in the perceived importance of the Ten Across skills based on academic major.

The ANOVA indicated that there were no significant differences for the four majors relative to the "importance" skills. Therefore, this hypothesis was retained. These

findings indicate homogeneity between the majors. All four of the majors surveyed felt that the Ten Across skills were either "very important" or "important."

Hypothesis 2: There is no difference in the perceived importance of the Ten Across skills based on gender.

The ANOVA indicated that there were significant differences between female and male responses for "importance" questions 8, Oral Communication, and 10, Teamwork. In both of these questions, the mean scores for the females were significantly higher than those for the males. Therefore, this hypothesis was rejected for these skills. In all 10 of the rated skills, females' mean scores were higher than those of the males (see Table 11). For the two noted skills, Oral Communication and Teamwork, there were statistically higher mean scores. These findings indicate that females, in general, felt that each of the Ten Across skills were more important to be taught than those of their male counterparts. While only significantly higher in 2 of the 10, it indicates that females perceived the Ten Across skills with more favor than men.

Hypothesis 3: There is no interaction between academic major and gender in the perceived importance on the Ten Across skills.

The ANOVA tested the interaction between major and gender for each of the ten questions. The test indicated that there were no significant interactions; therefore, the hypothesis was retained. The findings of the ANOVA indicate that regardless of a graduate's major or gender, their relative perceptions are statistically similar. There were no statistically significant interactions between the independent and dependent variables.

The third major research question in this study was:

3. To what degree do Indiana Wesleyan University Business and Management graduates perceive that they have shown progress in each of the Ten Across skills?

When using the criteria established above to determine the level of perceived progress, none of the 10 skills were perceived by graduates to be in the "significant progress" category; however, all 10 factors were perceived experiencing "considerable" or "some" progress by all of the graduates. There were eight of the skills that were perceived as evidencing "considerable progress." The skills are listed with descending mean scores. Additionally, qualitative comment sections were added under each of the 10 skills on the survey instrument with directions to respondents to indicate how "progress was demonstrated." The intention of these qualitative comments was to not only find out how much graduates perceived themselves as progressing, but also specifically in what ways they progressed. Listed with each of the skills are corresponding comments that substantiate or correspond to the quantitative rankings and mean scores.

- 1. Teamwork was perceived by graduates as the Ten Across skill evidencing the most amount of progress (Mean Score = 4.02):
 - a. "Learned more through this concept then at traditional college"
 - b. "One of the most powerful things I learned at IWU"
 - c. "A strength of the program"
 - d. "Another strong point"
 - e. "Learning team dynamics has been one of the greatest benefits of the IWU program"
 - f. "Team involvement was of great benefit during the program"
 - g. "This had to be the most important aspect of the program"

- h. "Best part of the program."
- 2. Writing Effectively (Mean Score = 3.98):
 - a. "Assignments sharpened written communication skills"
 - b. "My writing skills are more disciplined"
 - c. "Ability in this area has improved dramatically"
 - d. "My effectiveness...was incredible"
 - e. "This is my weakest skill and the writing assignments have helped me

improve"

- f. "IWU does an excellent job on this"
- g. "Writing used to scare me-love it now"
- h. "The program helped me overcome my phobia about writing"
- i. "I feel much improved in this area"
- j. "I've definitely improved"
- k. "I have improved significantly."
- 3. Oral Communications (Mean Score = 3.95):
 - a. "Speaking skills improved due to class presentations"
 - b. "Helped me considerably"
 - c. "Great gains here"
 - d. "This area is where I'm most improved"
 - e. "IWU does an excellent job of this"
 - f. "I cannot describe the gain in this respect"
 - g. "The most important part of my success to date"
 - h. "Strong point of program"

- i. "Went from being afraid of speaking in front of people to enjoying it"
- j. "I feel more confident each time I have to prepare and deliver presentations"
 - k. "Speaking to a group no longer bothers me"
 - 1. "Gave me more confidence"
 - m. "My level of comfort is very high."
- 4. Problem Solving (Mean Score = 3.78):
 - a. "Confidence to feel comfortable making decisions"
 - b. "I have grown a lot here'
 - c. "There is no problem I can't solve"
 - d. "Has improved 100%."
- 5. Lifelong Leaning (Mean Score = 3.77):
 - a. "IWU has the only program that addresses values"
 - b. "IWU instilled in me the need for continued education"
 - c. "I have learned how to learn"
- d. "The program made this goal very important and gave skills needed to make it happen."
- 6. Critical Thinking (Mean Score = 3.70):
- a. "It was so obvious in my work environment that significant progress has been made"
 - b. "Learned to focus and break down parts"
 - c. "A lot of progress here"
 - d. "Increased ability to analyze true problems"

- e. "Have enhanced my analytical skills."
- 7. Information Literacy (Mean Score = 3.64):
 - a. "I now use the library and internet frequently"
 - b. "I'm no longer afraid of libraries or the internet"
 - c. "Continued use improved my skills"
 - d. "Gave me the opportunity to do extensive research."
- 8. Ethics (Mean Score = 3.50):
 - a. "I see things with a different point of view"
- b. "The tools introduced provided me new approaches in ethical thinking and analysis"
 - c. "I evaluate situations from an ethical position prior to acting"
 - d. "Has made me more aware of ethical issues at work"
 - e. "Now have a Christian world view. Think and act accordingly"
 - f. "Looking at things through the 'WWJD' mentality helped guide us"
 - g. "It reinforced my Christian beliefs."

The other two skills were perceived as experiencing "some" progress. They include:

- 9. Reading Materials (Mean Score = 3.64):
 - a. "Forced me to develop new reading skills"
 - b. "Now I read to gain knowledge"
 - c. "I read now with more understanding"
 - d. "Read faster with better retention"
 - e. "Can now comprehend complex and involved material"

- f. "Reading has become more enjoyable and understandable"
- g. "I learned to study and comprehend."
- 10. Christian World View was perceived by graduates as the Ten Across skill evidencing the least amount of progress (Mean Score = 3.22):
 - a. "Improved knowledge of Christ"
 - b. "IWU opened my eyes again"
 - c. "I got to know Christ better"
 - d. "Helped bring me closer to Christ"
 - e. "My outlook has changed"
 - f. "Priorities realigned"
 - g. "I now base business decisions on a Christian perspective"
 - h. "Able to add Christian viewpoint in more day-to-day decisions"
 - i. "Two specific instructors...had a strong effect on my Christian maturity"
 - i. "Our best instructors start with devotions"
 - k. "The facilitators helped us think like Christians"
 - 1. "An atheist was won over to Christ"
 - m. "I felt IWU was surprisingly weak here"
 - n. "The Christian Worldview was never a part of our classes"
 - o. "IWU needs to do a better job of insuring its instructors share its

Christian values"

- p. "Not many facilitators incorporated this objective"
- q. "Integration of faith in the classroom was relatively sporadic"

- r. "IWU needs to make sure facilitators focus on this. It was hit or miss"
- s. "Not all facilitators were keying in on Christian concepts"
- t. "Very few of the professors made a tie with Christian values during instruction"
- u. "Only 40 to 50% of professors started class with prayer-could be improved."

As noted above, a number of studies were included in the Review of Literature that focused on business programs and the perceptions of graduates, business leaders, and current students, including Annis and Rice (1992); Ainsworth and Morley (1995); Paranto and Champagne (1996); Pesulima (1990); Tilley (1992); Jenkins and Reizenstein (1984); Aiken et al. (1994); Schmidt (1991), Crosling and Ward (2001), Martiniak (2000), Cudd and King (1995), Ulinski and O'Callaghan (2002), Cyphert (2002), and Richards-Wilson (2002). Certain skills were noted as important or were ones that graduates felt were necessary for success after graduation. The predominant theme that pervades all of these noted studies is the area of communications. Whether written or oral, these abilities have been found to be the most important for graduates of business schools.

What the findings for this Indiana Wesleyan University study show is that oral and written communications skills were perceived as evidencing "considerable progress" by the graduates surveyed and were the second and third highest rated of the 10 skills.

Again, it shows that Indiana Wesleyan University is emphasizing the skills that have been found to be of the most benefit to students. As reported in the above cited research studies, communications skills were deemed the most important, and the findings of this

study indicate that graduates not only found communications skills to be "very important" but they also found that they had evidenced "considerable progress" as well.

Graduates felt that they had progressed the most while a student at Indiana

Wesleyan in the area of teamwork and also demonstrated considerable progress in the
areas of effective writing and oral presentation skills. What this shows is that, overall,
Indiana Wesleyan programs are effectively preparing its graduates in the skills which have
been noted as important by the research in the field. The fact that teamwork and oral and
written communications were rated higher by graduates than the other Ten Across skills
substantiates the overall purpose of this research. The theoretical basis of this research
was to determine if Indiana Wesleyan follows the basic principles of adult education as
outlined above. What this research has shown is that Indiana Wesleyan's Business and
Management degree programs, at least as far as those graduates surveyed for this research
have indicated, are perceived as being effective when the principles espoused in the
principles of adult education are followed. Adult education principles such as selfdirection and collaborative learning have been shown by this study to be effective, as
perceived by the graduates of Indiana Wesleyan University's business and management
programs.

The fourth major research question in this study is:

4. What differences in perceived progress in the Ten Across skills are there among Indiana Wesleyan University Business and Management graduates based on academic major and gender?

To address this research question, there were three hypotheses tested using a twoway analysis of variance (ANOVA). Hypothesis 4: There is no difference in the perceived progress of the Ten Across skills based on academic major.

The ANOVA indicated that there was a significant difference indicated for "progress" question 1, Christian World View. A post-hoc Student-Newman-Kuels test indicated that the mean score for MBA graduates was significantly lower than the other three majors for "progress" question 1, Christian World View. Therefore, this hypothesis was rejected for skill 1. This finding indicates that MBA graduates statistically did not perceive themselves as progressing as much as the other three majors. While generally the "progress" questions indicated relative homogeneity amongst the four majors, at least the Ten Across skill of Christian World View showed a statistically different response for MBA graduates. However, for the other nine skills, there was again homogeneity among the four majors.

Hypothesis 5: There is no difference in the perceived progress of the Ten Across skills based on gender.

The ANOVA indicated that there was a significant difference between female and male responses for "importance" question 10, Teamwork. The mean score for the females was significantly higher than those for the males. Therefore, this hypothesis was rejected for skill 10. As seen in Table 15, in 7 of the 10 skills, females perceived themselves as progressing more than those of the male respondents. While only significantly higher in one of the skills, Teamwork, it again indicates that, generally, females viewed themselves as making more progress than the men.

Hypothesis 6: There is no interaction between academic major and gender in the perceived progress on the Ten Across skills.

The ANOVA tested the interaction between major and gender for each of the ten questions. The test indicated that there were no significant interactions; therefore, the hypothesis was retained. The findings of the ANOVA indicate that regardless of a graduate's major or gender, their relative perceptions are statistically similar. There was no statistically significant interaction between the independent and dependent variables.

Conclusions

Overall, it appears from the perceptions of Indiana Wesleyan graduates that being a "Christian" University is not as important to them as are areas considered giving more academic preparation. In all four majors surveyed, graduates perceived that the Ten Across skill of "Christian World View" was the least important (based on the mean scores). Furthermore, in all four of the majors, graduates perceived themselves as progressing less in the skill of Christian World View than in the other skill areas (again, based on mean scores). While not found to be statistically significant (except for MBA graduates for the Christian World View skill for progress, see Tables 13 and 14), these perceptions show that graduates may look to Indiana Wesleyan not for its Christian mission and purpose, but more for the academic skills it emphasizes in the programs it offers. Graduates perceived teamwork, problem solving, and oral and written communications skills as among the highest as far as importance and progress, which is consistent with other research identified in this study.

University administration knows that students choose Adult and Professional

Studies programs for their convenience and affordability, as well as their reputation for offering practical, application-based academic degrees. The fact that Indiana Wesleyan is

a Christian institution may not play as high a role in a student's selection process as does these other more pragmatic reasons. This assertion should in no way be a condemnation of the University's Christian World View, for the written comments noted above positively evidence that the University is having an impact on some students. As is the case of a missionary on foreign soil, if one person "comes to Christ," then the University should feel that it has achieved its mission related to having students experience this Christian World View.

The degree programs are marketed for their academic integrity as well as for the convenience to adult working professionals. Students are made aware that the University espouses a Christian World View, but this fact evidently is not the main reason students choose to enroll. The findings of this study further corroborate this fact.

The study shows that, in general, the graduates of Indiana Wesleyan University's Business and Management degree programs are fairly homogeneous in their perceptions. There were no significant differences between majors in their perceptions of the importance of the Ten Across Skills, and only MBA graduates were found to have statistically lower mean scores than the other majors, relative to their progress in the Ten Across skills. It is this researcher's conjecture that the reason for MBA graduates' lower mean scores has to do with their higher academic expectations. Having taught at all levels within the APS programs, including associate's degree, bachelor's degree, as well as in both graduate programs, I find that MBA students tend to be of a higher caliber of student from an academic preparation standpoint, and tend to expect more from professors. I believe that they expect much higher level of learning outcomes; therefore their lower ratings are not unexpected.

With regard to gender issues, in 2 of the 10 "importance" questions, Oral Communications and Teamwork, females were found to rate the importance significantly higher than the male respondents. In one of the "progress" questions, Teamwork, again females rated their progress significantly higher than the males. Other than these three questions, both female and male respondents were homogenous in their perceptions.

According to the research undertaken by Belchier (1998), "women approach learning differently than the traditional male college student" (p. 1). Among her findings was that for women "trust and collaboration worked best" (p. 2). Wiess (2001) also found that women tend to be "collaborative learners" (p. 144) more so than men. These findings could indicate some of the marked differences in these studies' differences between male and female respondents, especially in the ratings of the Teamwork skill.

In no case was there found to be statistically significant interactions between academic major and gender. It appears that relative to any interactions between major and gender, the responses were, again, homogenous.

The results of this study indicate that graduates perceive the University to be stronger in some areas, and conversely, weaker in others (although generally, not statistically significant). Based on both quantitative analysis of data and qualitative graduate comments, the area needing the most emphasis is the Ten Across skill, Christian World View. As noted above, this skill was perceived by graduates as the least important and the skill evidencing the least amount of progress (although overall it was perceived as "important" and evidenced "some progress").

The fact that graduates perceive the skill of Christian World View as being the least important and evidencing the least amount of progress is consistent with previous

research conducted by the Assessment Office of the Adult and Professional Studies programs. All faculty, both adjunct and full-time, are evaluated in the classroom on a number of critical teaching techniques and methodologies. On an annual Business and Management Department Assessment report from December of 1998, the teaching skill of "Presented a devotional that was pertinent and enriched the curriculum" received the lowest rating from among all 16 categories. Also receiving a low rating (third lowest from the 16 categories) was the skill of "Related Biblical Principles" to the curriculum (IWU, 1998).

The implication of this assessment is that when classroom evaluation visits are made, the areas that faculty continually receive the lowest ratings relate to these "Christian World View" categories. Faculty receive much higher ratings in the more academic-related teaching areas such as "constructive feedback," "student/facilitator interaction," and "enthusiasm and leadership qualities." The fact that faculty are rated lower in the classroom by peers and administrators in the area of integration of Christian World View into the classroom correlates with this study in that graduates perceived that they made less progress in this skill than in the other Ten Across skills. There were also a number of qualitative comments made by graduates on the survey instruments that coincide with this issue, including: "I felt IWU was surprisingly weak here"; "The Christian Worldview was never a part of our classes"; "IWU needs to do a better job of insuring its instructors share its Christian values"; "Not many facilitators incorporated this objective"; "Integration of faith in the classroom was relatively sporadic"; "IWU needs to make sure facilitators focus on this. It was hit or miss"; "Not all facilitators were keying in on Christian concepts";

"Very few of the professors made a tie with Christian values during instruction"; and "Only 40 to 50% of professors started class with prayer-could be improved."

This indicates that faculty may need stronger training in the area of integrating their faith into the classroom. While a considerable amount of in-service training was conducted for faculty during 1998, 1999 and 2000, this study examined only graduates' perceptions for the years 1996, 1997, and 1998. In terms of continuing in-service training, the area of faith integration should be the highest priority as evidenced by this study's results.

On the positive side, the three skills that this research indicated were the strongest were teamwork, and oral and written communication skills. These three skill areas were perceived by graduates as ones in which they evidenced the most amount of progress while they were students. The implications of these higher ratings cannot be underestimated as other research documented in this study indicated that these areas were the highest priority for Business and Management programs in general. The University appears to be the strongest, at least from graduate perceptions, in these three areas. The study group process, which emphasizes teamwork and is perceived by graduates as the "strength of the program," should be continued and emphasized. Students continually give oral reports and write a significant amount of papers as requirements for all of Indiana Wesleyan's degree programs. Based again on both quantitative analysis and qualitative student comments, the requirements for oral presentations and written reports should also continue to be emphasized.

The skill of "Information Literacy" relates to the ability to conduct research. It was perceived lower than most of the other skills by graduates in importance and it also

was perceived lower than other skills in progress made (it was the seventh-ranked skill out of the ten). Part of the dilemma with this particular skill is that many, if not most, of the course assignments require students to develop oral and written reports based on applications of the in-class lectures and discussions, not assignments based on more traditional library research. A typical class night covers a few chapters of reading material, discusses their implications, and has the students write a paper and/or conduct an oral presentation on the application of the material to their respective workplace. While this method emphasizes the application of "theory to practice," it unfortunately does not force the student to conduct more traditional primary research. With the increased usage of the Internet, traditional library usage appears to be decreasing. This area too should receive greater emphasis.

Recommendations for Further Research

This study investigated the importance of and progress made in the Ten Across life-skills as perceived by graduates. It examined two demographic criteria from among the graduates surveyed: majors and gender. Based on the results of this study, there are a number of recommendations for further research. The Ten Across skill of Christian Worldview is the most salient of the issues that should be explored. Indiana Wesleyan has spent considerable effort in providing in-service training for its faculty in the area of faith integration in the classroom, especially since 1998. The issue of gender should also be explored. The differences in female and male responses are an anomaly that further research could explain. It is recommended that:

- 1. A new survey of graduates since 1999 should be undertaken. It would hopefully show that the in-service training that has taken place has improved the faculty's ability to integrate their Christian faith into the classroom. What the further research would show is if graduates from these later years perceive the importance of and progress in the skill of Christian World view as higher than those in the previous year's research. University administration was unaware that this Ten Across skill would be rated as the lowest of the Ten Across skills by its graduates. However, it felt, at the time, that the training was necessary because of the overall University mission. Further research, using the same survey instrument and sampling graduates from the same four majors, would show whether this training paid off, at least in the perceptions of the graduates.
- 2. Research should be undertaken to determine the effectiveness of in-service training of faculty. It has been noted that Indiana Wesleyan University has an ongoing program of in-service training available for its faculty. Since most courses are taught (or as more commonly referred to as "facilitated") by adjunct faculty, there is a standing question of the quality of instruction. While Indiana Wesleyan spends considerable time and effort on orienting and training new faculty on teaching methodologies and the integration of faith into the classroom, there has not been research to determine the effectiveness of this training. To coincide with the above recommendation for a follow-up survey of graduates, it is further recommended that in-service training be analyzed especially for its effectiveness related to preparing faculty to integrate their faith into Indiana Wesleyan classrooms. Indiana Wesleyan teachers espouse their Christian World View as part of their mission, but it is not known whether faculty members are being

adequately prepared to integrate this Christian World View into every course and into every night of instruction.

- 3. The gender diversity issue should be further examined. It was noted above that generally, female graduates rated the Ten Across skills higher than their male counterparts (although only statistically significant in 3 of the 20 questions). Further research would hopefully determine why females and males differ in their respective perceptions. A recommendation would be to develop a survey instrument that would probe more specifically into gender issues. What this new survey hopefully would accomplish would be to determine why females' perceptions were different from males. The issue of gender is one that is difficult to remedy. Since Indiana Wesleyan is a co-educational institution, all of the Adult and Professional Studies programs contain both male and female students. There have never been any efforts placed on curriculum development or teaching methodologies that differentiated between male or female students.
- 4. The relationships between the variables studied and the overall importance and progress perceived by graduates should be measured. It was decided at the outset of this research that interactions between importance and progress were not going to be analyzed. It would further enhance this research if it can be determined whether interactions exist between the major and gender variables and how the respondents might have answered relative to their responses to both the importance and progress questions.

Recommendations for Practice

This research has shown the Christian World View skill has been perceived by graduates as the least important and the skill evidencing the least amount of progress.

Since Indiana Wesleyan University espouses this world view and considers it a primary part of its mission, further research is recommended:

- 1. Indiana Wesleyan University should investigate methods that other universities use to integrate faith into their courses and classrooms. The use of the "benchmarking" tool is used heavily in business settings. Benchmarking is defined as "the search for the best practices among competitors or noncompetitors that lead to their superior performance" (Robbins & Coulter, 2002, p. 228). There are numerous other Christian colleges and universities that Indiana Wesleyan could benchmark against related to how they integrated faith into the classroom. A survey could be undertaken of selected schools to determine how these other schools orient and train their faculty relative to the issue of faith integration. Results of this research could further assist Indiana Wesleyan in better preparing its faculty to address the issue of the perceived lower progress of graduates in the Christian World View Ten Across skill.
- 2. Indiana Wesleyan University should investigate the impact faculty have on students in the area of integration of their faith into the classroom. While it certainly would be important to measure this impact from all faculty, more importantly, it is more important to measure this impact with regard to adjunct faculty. Since the APS programs are essentially adjunct-driven, in the sense that the vast majority of courses are taught by adjunct faculty, finding out what impact they have on students would aid Indiana Wesleyan University in determining the effectiveness of its faith integration into the classroom. As was previously stated, in-class faculty evaluations found that the area of faith integration was the weakest among faculty reviewed for an institutional assessment report (IWU, 1998). Many of the qualitative comments already noted indicated a

disappointment among many graduates with this area. It is recommended that research be completed that would measure the effectiveness and impact that faculty, and especially adjunct faculty, have on students with regard to faith integration.

APPENDIX A INITIAL SURVEY INSTRUMENT

The Indiana Wesleyan University Division of Adult and Professional Studies has identified ten lifeskills as keys to success in the information age. Forging goals around these ten qualities, IWU has sought to construct our courses with these goals in mind. Throughout your enrollment at IWU, it was our hope that you have made significant progress in the development of each of these ten areas.

Listed below are the ten life-skills. Please answer the two (2) sets of questions related to each of the ten skills by circling the appropriate response:

- How important is it that IWU develop these qualities in its graduates?
- How significantly did you progress in each of the areas?

<u>Importance</u> <u>Progress</u>	
5 Very Important 5 Very Significa 4 Important 4 Considerable 3 Moderately Important 3 Some Progres 2 Of Little Importance 2 Little Progress 1 Unimportant 1 No Progress	Progress s
5 4 3 2 1 1) The ability to see things from the perspective of a Christian world view.	5 4 3 2 1
5 4 3 2 1 2) Skill in ethical thought and action.	5 4 3 2 1
5 4 3 2 1 3) Values and skills necessary for lifelong learning.	5 4 3 2 1
5 4 3 2 1 4) The ability to read complex materials with comprehension.	5 4 3 2 1
5 4 3 2 1 5) Skill in thinking critically concerning ideas and performance.	5 4 3 2 1
5 4 3 2 1 6) Skill in problem solving and making decisions.	5 4 3 2 1
5 4 3 2 1 7) The ability to communicate effectively through writing.	5 4 3 2 1
5 4 3 2 1 8) The ability to communicate effectively orally.	5 4 3 2 1
5 4 3 2 1 9) The ability to find needed information (information literacy).	5 4 3 2 1
5 4 3 2 1 10) The ability to work effectively in teams.	5 4 3 2 1

11) Degree Earned from IWU:	
BSM	
BSBA	
BSOL	
MSM	
MBA	
12) Year Graduated	
13) Sex	
Female	
Male	

Would you also please answer the following demographic questions?

APPENDIX B $2^{ND} \, DRAFT \, SURVEY \, INSTRUMENT$

The Indiana Wesleyan University Division of Adult and Professional Studies has identified ten life-skills as keys to success in the information age (known as the Ten Across). Forging goals around these ten qualities, IWU has sought to construct our courses with these goals in mind. Throughout your enrollment at IWU, it was our hope that you have made significant progress in the development of each of these ten areas.

Listed below are the ten life-skills. Please answer the two (2) sets of questions related to each of the ten skills by circling the appropriate response:

- How important is it that IWU develop these qualities in its graduates?
- While a student at IWU, how significantly did you progress in each of the areas?

In the comment section below each of the skills, please indicate how you have demonstrated progress, i.e. give examples.

<u>Importance</u>		Progress	
	Importance ely Important t	 No Progress Little Progr Some Progr Considerabi Very Signif 	ess ess le Progress
	The ability to see things from the perspective of a Characteristic Comments.	ristian world view.	
1 2 3 4 5	Skill in ethical thought and action. Comments		1 2 3 4 5
1 2 3 4 5	Values and skills necessary for lifelong learning. Comments		1 2 3 4 5
1 2 3 4 5	4) The ability to read complex materials with comprehe Comments		1 2 3 4 5
1 2 3 4 5	5) Skill in thinking critically concerning ideas and performents		1 2 3 4 5

1 2 3 4 5	6) Skill in problem solving and making decisions.	1 2 3 4 5
	Comments	
1 2 3 4 5	7) The ability to communicate effectively through writing.	1 2 3 4 5
	Comments	
1 2 3 4 5	8) The ability to communicate effectively orally. Comments	1 2 3 4 5
1 2 3 4 5	9) The ability to find needed information (information literacy). Comments	1 2 3 4 5
1 2 3 4 5	10) The ability to work effectively in teams.	1 2 3 4 5
	Comments	
	also please answer the following demographic question?	
11) Degree E	Earned from IWU:	
	BSMBSBABSOLMSMMBA	

APPENDIX C FINAL DRAFT SURVEY INSTRUMENT

The Indiana Wesleyan University Division of Adult and Professional Studies has identified ten lifeskills as keys to success in the information age (known as the Ten Across). Forging goals around these ten qualities, IWU has sought to construct our courses with these goals in mind. Throughout your enrollment at IWU, it was our hope that you have made significant progress in the development of each of these ten areas.

Listed below are the ten life-skills. Your ratings to the following two questions will help us in our continuing efforts at increasing the quality of IWU programs.

- How important is it that IWU develop these qualities in its graduates?
- While a student at IWU, how significantly did you <u>progress</u> in each of the areas?

Using the five (5) point rating scales, circle the appropriate number that best corresponds to your feeling about the ten skills. In the comment section below each of the skills, please indicate how you have demonstrated progress, i.e. give examples.

Importance	<u>Progress</u>
 1 Unimportant 2 Of Little Importance 3 Moderately Important 4 Important 5 Very Important 	 No Progress Little Progress Some Progress Considerable Progress Very Significant Progress
1 2 3 4 5 1) The ability to see things from the po	
1 2 3 4 5 2) Skill in ethical thought and action. Comments	
1 2 3 4 5 3) Values and skills necessary for lifel	
1 2 3 4 5 4) The ability to read complex materia Comments	als with comprehension. 1 2 3 4 5
1 2 3 4 5 5) Skill in thinking critically concern Comments	ning ideas and performance. 1 2 3 4 5

1 2 3 4 5	Skill in problem solving and making decisions.	1 2 3 4 5
	Comments	
		
1 2 3 4 5	7) The ability to communicate effectively through writing.	1 2 3 4 5
	Comments	· · · · · · · · · · · · · · · · · · ·
1 2 3 4 5		1 2 3 4 5
	Comments	
1 2 3 4 5	9) The ability to find needed information (information literacy).	1 2 3 4 5
	Comments	-
1 2 3 4 5	10) The ability to work effectively in teams.	1 2 3 4 5
	Comments	
Would you a	also please answer the following demographic question?	
11) Highest of	degree earned from IWU:	
-	BSMBSBABSOLMSMMBA	

APPENDIX D SURVEY COVER LETTER

Dear APS Business and Management Graduate,

I am conducting research on IWU's Business and Management programs as part of my doctoral dissertation. I would appreciate a few minutes of your time to complete the enclosed questionnaire.

As you remember back to when you were a student at IWU, we identified ten life skills as keys to your success. These ten skills are known as the "Ten Across." We have developed courses with these ten skills in mind. Throughout your enrollment at IWU, it was our hope that you made significant progress in the development of each of these Ten Across areas.

The purpose of my research is to determine your perceptions of these Ten Across life skills. On the enclosed questionnaire, your ratings to the following two questions will help us in our continuing efforts at increasing the quality of IWU programs.

- How <u>important</u> is it that IWU develop these qualities in its graduates?
- While a student at IWU, how significantly did you <u>progress</u> in each of the ten areas?

This research can be completed only with your cooperation and support. Please take the time to complete and return the stamped and self-addressed questionnaire. All replies will, of course, be kept strictly confidential.

Thank you for your thoughtful participation and helpful assistance.

Yours in Christ,

Joe Flowers
Assistant Professor of Business

Enc: Questionnaire

APPENDIX E REMINDER POSTCARD

Dear APS Business and Management Graduate,

A couple of weeks ago, you should have received a questionnaire from me asking you to give your perceptions of our Business and Management programs. If you have not already done so, will you please take a few minutes to complete and return it to me.

Your cooperation will have a direct bearing on the success of this research and its goal of increasing the quality of IWU programs.

Thank you very much for your help—without it, this research cannot be completed.

Yours in Christ

Joe Flowers Assistant Professor of Business

APPENDIX F $2^{ND} \ REMINDER \ COVER \ LETTER$

Dear APS Business and Management Graduate,

Last month, you received a letter and questionnaire from me soliciting your perceptions of our Business and Management programs, which is the topic of my research. I'm on the homestretch now—almost XX% of your fellow graduates have completed and returned the questionnaire.

The success of this research is now directly dependent upon your help. I know how busy you are, so to save you time, I am enclosing another stamped self-addressed questionnaire.

Will you please take a few minutes to complete it and send it to me? Thank you very much.

Yours in Christ

Joe Flowers
Assistant Professor of Business

Enc: Questionnaire

APPENDIX G WRITTEN COMMENTS

Skill 1 - The ability to see things from the perspective of a Christian world view

- Improved knowledge of Christ and helped me to grow.
- I don't see this as much of a skill, as a philosophy. Don't particularly see this as a responsibility belonging to LEAP.
- My children & I have joined a new church & attend every Sunday.
- Two specific instructors-one in the BSBA program and one in the MSM program-had a very strong effect on my Christian maturity.
- IWU needs to do a better job of insuring its instructors share its Christian values.
- IWU opened my eyes again. I had not opened a Bible since I was very young, I now read the old testament routinely.
- Too many different views.
- Through your program, I got to know Christ better and made a part of my life.
- I've begun an outreach program for people with Crohn's disease, an illness I have had for 16 years. I help them learn methods to deal with chronic illness.
- It was helpful to me at that time in my life. At other times it would have seemed intrusive.
- Timing was right for me. The required Bible studies gave me a basic understanding that had been missing from my life.
- The program and environment helped bring me closer to Christ.
- Daily decisions.
- Being able to see things from a Christian view makes it easier to make decisions.
- Devotions were helpful.
- This experience has enlightened my life and my view of the world. It is something I will carry with me for the rest of my life.
- It helped broaden my perspective in dealing with people everyday.
- Increase awareness of Christian & non-Christian acts around me.
- Most of the instructors gave personal examples of understanding the world from a Christian perspective. This reinforced my Christian belief and helped me to remember to view situations with a Christian heart.
- You can be a businessman and still be a Christian.
- My mindset is gentler and stronger-more confident to be myself.
- An atheist was won over to Christ.
- I now listen (not just hear) other peoples ideas-Increased respect.
- Not many facilitators incorporated this objective.
- Our best instructors start with devotions.
- I now base business decisions on a Christian perspective.
- Am now Pastoring a church on a bi-vocational basis.

- Learned about Jesus and the Bible.
- My total outlook has changed since I attended IWU.
- IWU successfully applied a Christian perspective to a "worldly" environment by teaching Christian principles applicable to the secular business world.
- I felt IWU was surprisingly weak here.
- Priorities realigned-Family comes first, work comes after.
- Have improved in doing things from Christian Perspective.
- The courses required me to stretch beyond my current perspectives.
- Integration of faith in the classroom was relatively sporadic.
- IWU needs to make sure facilitators focus more on this. It was hit or miss.
- I have grown as a Christian since graduation.
- Bible study, attend church regularly, and daily prayer.
- Not all facilitators wee keying in on Christian concepts.
- The more exposure/interaction you have with Christian views, the more you will learn to view life from that direction.
- Some of my facilitators were committed to this, others were not.
- Discriminatory practices and remarks by facilitators don't walk the talk.
- My faith has grown considerably since graduation.
- Very few of the professors made a tie with Christian values during instruction.
- From networking out with classmates, I was able to gain their religious views and it helped me in my own.
- Able to add Christian viewpoint in more day-to-day situations.
- The facilitators helped us think like Christians while teaching us business skills.
- Only 40 to 50% of professors started class with prayer-could be improved.
- The classroom examples applying Christian values is helpful in other settings.
- The Christian Worldview was never a part of our classes. However, we knew it was part of the university.
- While a student, I only had 2 instructors who incorporated this. You were one of them.

Skill 2- Skill in ethical thought and action.

- The tools introduced provided me new approaches in ethical thinking and analysis.
- I have become more aware of my actions and their outcome.
- I now attempt to consider everyone involved when making decisions.

- Has made me more aware of ethical issues at work.
- Guided by the Golden Rule.
- I see things with a different point of view.
- Now have a Christian world view. Think and act accordingly.
- I evaluate situations from an ethical position prior to acting, now more than before my MBA.
- The LEAP program reaffirmed the need for ethics.
- Looking at things through the "WWJD" mentality helped guide us.
- My fellow classmates were very ethical and that rubbed off on me.
- The classroom examples applying Christian values is helpful in other settings.
- Involve prayer in daily activity.
- This was emphasized throughout. It reinforced my Christian beliefs.

Skill 3 - Values and skills necessary for lifelong learning.

- Teachers demonstrated this very well.
- During 30+ years of "college Learning", IWU has the only program that addresses values.
- I am much more focused on family values vs. aspects of business.
- Made me more marketable.
- IWU instilled in me the need for continued education.
- Changed outlook.
- I have learned how to learn! I am using it everyday in many ways.
- Instead of seeing Christianity only on Sunday. I learned that Christian values are applicable everyday and everywhere-not just church.
- I felt the "system thinking" was the biggest lesson to come out of the program.
- I felt my MBA experience made me more focused on continuing education, and personal and professional values.
- The program made this goal very important and gave skills needed to make it happen.

Skill 4 - The ability to read complex materials with comprehension.

- With the self-study needed for LEAP, students learned to read & comprehend.
- Volume reading forced me to develop new reading skills.
- I read now with more understanding.

- Read faster with better retention.
- I used to just read the words, now I read to gain knowledge
- My perception of the instructors was that they did not feel it important that you have a detailed understanding of topics, rather that you grasp what is important to your workplace.
- Used to skim and miss a lot.
- I became better at "weeding" through volumes of reading material.
- Many times I had read the material more than once to comprehend how it related to the course and my profession.
- Can now comprehend complex and involved reading.
- In many cases, reading of material was not stressed (I was not required to do this to do well).
- Reading has become more enjoyable and understandable.
- I learned to "study" and comprehend during my MBA.
- IWU fell short-there needs to be a speed reading class early on to assist in this.
- Can read much more and understand more from a financial standpoint.

Skill 5 - Skill in thinking critically concerning ideas and performance.

- Not much progress. Need more feedback of a complex nature in program.
- It was so obvious in my work environment that significant progress has been accomplished.
- This wasn't stressed because most students don't participate.
- I learned skills I still use to work with others toward a common goal.
- Learned to focus and breakdown parts.
- "Teaming" skills were valuable in this area.
- A lot of progress here.
- I now think things through and weigh consequences.
- Increased ability to analyze true problems to arrive at "true solutions".
- I evaluate and look at more sides of a problem better now.
- Have enhanced my analytical skills.
- I feel my MBA has made me a well rounded thinker.
- Problem solving activities in the program were helpful.
- This skill came through interaction and communication.

Skill 6 - Skill in problem solving and making decisions.

- This is an area lacking because of low class participation.
- Degree gives me confidence to feel comfortable making decisions.
- I have grown a lot here due to IWU.
- Curriculum needs to include a business writing course in the beginning so that the skills can be developed with all the papers that are required.
- I have learned to look at problems differently and solve them in a more efficient way.
- There is no problem I can't solve in my line of work.
- This area needs more attention.
- Has improved 100%.
- Very helpful in teaching me to break a problem into solvable components.
- I've been able to make more thorough analysis of available information before committing to one alternative.
- My time at IWU helped me analyze things from a business point of view as well as ethical point of view.
- Classes with case studies helped me improve in this area.
- The MBA program presented some good material in problem solving and making decisions.
- Have recently been promoted and am now using more of these skills.

Skill 7 - The ability to communicate effectively through writing.

- Written assignments sharpened written communication skills.
- The practice from writing so many papers was helpful.
- My effectiveness in writing at the beginning of my IWU career to BSBA was incredible.
- Writing papers in the program helped me develop sequential thinking while writing.
- I feel much improved in this area. Able to express well through writing.
- This is my weakest skill and the writing assignments have helped me improve on this.
- I've definitely improved! People always comment how they have noticed a significant improvement!
- Due to the heavy load of written papers and critiques given by instructors, and the final thesis, my writing skills are more disciplined.
- This has always been my weakest area. IWU did help me also. Not only the instructors, but my classmates as well.
- This is a must! IWU does an excellent job on this.
- Writing assignments were excellent tool.

• My ability to write has improved. • Writing used to scare me-love it now.

• I have improved significantly.

• I can now write my thoughts in an orderly fashion.

• Writing skills improved throughout program. • Ability in this area has improved dramatically.

• Frequent writing assignments were helpful.

• I learned to write and present effectively.

• Presentation helped oral communications

company.

• The program helped me overcome my phobia about writing.

• As a manager, I feel more rounded in my ability to write.

Skill 8 - The ability to communicate effectively orally.

• Went from being afraid of speaking in front of people to enjoying it.

• Presentation requirements wee excellent for future performance.

• Good emphasis placed by facilitators. • It helped fine tune my writing skills. • Increased writing improved skills.

• The workload of papers helped to improve my writing skills for my position. • My written communication has improved since I started the MSM program.

• Because of my disability, my best source of communication is writing.

• Great gains here.

• I found that I enjoy oral presentations which has helped with my new sales job. • Was helpful making me more comfortable and preparing in a short period of time.

• Prior to my IWU experience, I could NOT present ideas verbally-now, it's second nature.

• Some of my co-workers do not understand accounting procedures so I have to use common words to help them understand.

• Since my classes at IWU, I have utilized the oral communications skills in presentations at a corporate level of our

• The clarity and brevity of may letters have increased. I no longer strive to solve all problems with one correspondence.

• I feel more confident each time I have to prepare and deliver presentations.

- Joined Toastmasters at work.
- This area is where I'm most improved because of attending IWU.
- Better organized, better recognition of audience needs.
- This has given me the opportunity to speak in front of people and share my experience.
- My job required hours (months) of public speaking-sometimes all day, everyday for weeks at a time-I <u>never</u> could've done that had I not gone through IWU's program.
- Presentations in front of groups is much easier.
- Thanks to the number of oral presentations at IWU, speaking to a group no longer bothers me (as much!).
- The classes gave me more confidence and practice.
- This is a must! IWU does an excellent job on this.
- Speaking skills improved due to class presentations
- Confidence to express myself orally.
- Every class required oral presentations. I improved tremendously from Day 1 to my last class.
- I am more relaxed at giving presentations.
- I feel that I can defend my views better and make better arguments.
- My level of comfort is very high when I am summoned by the COO or CEO of my company.
- I cannot describe the gain in this respect.
- Crucial! The most important part of my success to date.
- Strong point of program.
- Ability in this area has improved dramatically.
- The frequent presentation assignments were very helpful.
- The program helped me get comfortable with presentations, which I benefit from in my current position.
- The opportunity to present orally in every class helped me considerably.
- The many oral presentations helped my public speaking ability.
- I am more at ease in front of a group.
- At the end of my degree, I felt more comfortable speaking that when I started.
- I greatly improved my speaking skills.
- Frequent speaking assignments were helpful.
- I became more comfortable in speaking situations.
- This was one of my weakest areas. The program really helped.

• More comfortable speaking in front of groups, especially if I know the subject matter.

Skill 9 - The ability to find needed information (information literacy).

- I now use the library & Internet frequently to find information.
- The campus library was a tremendous resource.
- I'm no longer afraid of libraries or the Internet.
- Know my way around the library.
- The research was an area of weakness for me initially, but continued use improved my skills.
- IWU's Library services are excellent.
- Knowing where to find information is very important and the research requirements of the MBA developed this skill.
- Not significant progress made here.
- Learned to use the library.
- It gave me the opportunity to do extensive research.

Skill 10 - The ability to work effectively in teams.

- One of the most challenging parts of the LEAP program. I find that the skills I gained in the LEAP program are very helpful.
- Joined 2 new team committees.
- IWU has taught me how to use strengths & weaknesses and develop a productive team and to effectively work in those teams.
- Before going through the LEAP program, I was intimidated in groups.
- One of the most powerful things I learned at IWU.
- I've always been a team player, but more so since IWU!
- The educational value of the "teaming" is overrated!!!
- Learned more through this concept then at traditional college.
- Our study group was not able to do this effectively.
- Our team did not function well. Suggest to rotate teams.
- My experience on my team helped me really understand the whole is more that the sum of the parts.
- IWU taught me how to work in teams. I have used what I learned at IWU in my daily dealings at work.
- Excellent learning method!
- No question. A strength of the program and at times, a stressful issue, but simulates "real world."

- Another strong point.
- Without teams we would not succeed. Learning team dynamics has been one of the greatest benefits of the IWU program.
- Team involvement was of great benefit during the program.
- The team concept of the MBA is excellent and makes people work together to succeed.
- I learned through the program that teamwork is essential.
- I learned to negotiate in a group.
- Classes were structured as to promote teamwork. I think that it helped me quite a bit.
- This is very important and good progress was made -important.
- This had to be the most important aspect of the program.
- Best part of the program.
- Learned more about team building to use in my current possession.

APPENDIX H TWO-WAY ANALYSIS OF VARIANCE

anova I1 Gender Major Gender * Major

	Number of obs Root MSE			quared R-squared	= 0.0254 = -0.0042
Source	Partial SS	df	Ms	F	Prob > F
Model	6.33532655	7	.905046651	0.86	0.5394
Gender	.14951306	1	.14951306	0.14	0.7067
Major	.361368144	3	.120456048	0.11	0.9516
Gender*Major	4.8759749	3	1.62532497	1.54	0.2040
Residual	243.246263	231	1.05301413		
Total	249.58159	238	1.04866214		

Means, Standard Deviations and Frequencies of I1

	Major				
Gender	1	2	4	5	Total
1	3.9318182 1.0868715 44	4.0714286 .89973541 28	4.2222222 .94280904 18	4.2352941 .90342486 17	.9835537
2	4.3030303 .98376981 33	4.037037 .93978236 27	4.0625 .92870878 16	3.8392857 1.17205 56	1.0590642
Total	4.0909091 1.0535881 77	4.0545455 .91120965 55	4.1470588	3.9315068 1.1221107 73	4.041841

anova I2 Gender Major Gender * Major

	Number of obs Root MSE			-squared dj R-squared	= 0.0578 = 0.0295
Source	Partial SS	df	MS	F	Prob > F
Model	6.14328879	7	.877612684	2.04	0.0507
Gender Major	1.37496705 2.22957734	1 3	1.37496705 .743192446	3.20 1.73	0.0749 0.1616
Gender*Major	2.44111836	3 233	.81370612	1.89	0.1313
Residual	100.105674	233 240	442704011		

Means, Standard Deviations and Frequencies of I2

Gender	Major 1	. 2	4	5	Total
1	44	27	18	4.6470588 .60633906 17	.58338788 106
2	4.4		4.75	4.4736842 .73448872 57	4.4296296 .71800658
Total	4.4303797 .61359688 79	4.444444 .76889204 54	4.7058824 .46249729 34	4.5135135 .70697587 .74	4.4979253

anova I3 Gender Major Gender * Major

	Number of obs Root MSE			quared = R-squared =	= 0.0414 = 0.0126
Source	Partial SS	df	MS	F	Prob > F
Model	5.12688938	7	.732412769	1.44	0.1904
Gender	1.6364147	1	1.6364147	3.22	0.0742
Major	.824025405	3	.274675135	0.54	0.6555
Gender*Major	1.86977155	3	.623257182	1.22	0.3014
Residual	118.574355	233	.508902813		
Total	123 701245	240	515421853		

Means, Standard Deviations and Frequencies of I3

į	Major				
Gender	1	2	4	5	Total
1	4.5681818 .58658362 44	4.5925926 .69388867 27	4.444444 .78382338 18	4.5882353 .61834694 17	.64851756
2		4.1481481 .81823937 27	.62915287 16	4.4736842 .78160236 57	.76040779 135
Total 	4.443038 .6552908 79	4.3703704 .7841904 54	4.5 .70710678 34	4.5	4.4522822 71792886

anova I4 Gender Major Gender*Major

	Number of obs			squared j R-squared	
Source	Partial SS	df	MS	F	Prob > F
Model	3.02602664	.7	.43228952	0.76	0.6215
Gender Major Gender*Major	.000389483 1.26880116 1.4548326	1 3 3	.000389483 .42293372 .484944199	0.00 0.74 0.85	0.9791 0.5271 0.4665
Residual	131.969807	232			
Total	134.995833		.564836123		

Means, Standard Deviations and Frequencies of I4

l	Major				
Gender	1	2	4	5	Total
1	4.4545455 .58883193 44	26	.84016805 18		.69311105
2	4.3142857 .718308 35	4.2592593 1.022538 27		4.3333333 .76376262 57	.79613494
Total 	4.3924051 .64881987 79	4.3396226 .8535761 53	4.1470588 .78363384 34	4.3378378 .7635 74	4.3291667 .7515558 240

anova I5 Gender Major Gender*Major

	Number of obs Root MSE		240 66747		quared R-squared	= 0.0358 = 0.0067
Source	Partial SS	df	MS		F	Prob > F
Model	3.82646898	7	.5466384	26	1.23	0.2872
Gender Major Gender*Major	1.19937064 1.77465578 .826011485	1 3 3	1.199370 .5915519 .2753371	27	2.70 1.33 0.62	0.1018 0.2651 0.6031
Residual	103.136031	232	.4445518	58		·
Total	106.9625	239	.4475418	41		

Means, Standard Deviations and Frequencies of I5

1	Major				
Gender	1	2	4	5	Total
1	4.3488372 .75225758 43	4.6666667 .5547002 27	18	4.5294118 .62426427 17	.67977048 105
2	4.2285714 .77024497 35		4,3125	4.4210526	4.3333333 .65790259
Total	4.2948718 .75779883 78	4.4814815 .63664038 54	4.3235294 .63820716 34	4.4459459 .60004319 74	1 .66898568

anova I6 Gender Major Gender*Major

	Number of obs			R-squared	= 0.0557
	Root MSE	= ,!	581095 1	Adj R-squared	= 0.0272
Source	Partial SS	df	MS	F	Prob > F
Model	4.62285278	7	.66040754	1.96	0.0620
Gender	.399270377	1	.39927037	7 1.18	0.2780
Major	2.56119284	3	.85373094	6 2.53	0.0581
Gender*Major 	1.10341275	3	.3678042	1.09	0.3544
Residual	78.3396472	232	.337670893	3	

.347123431

239

Means, Standard Deviations and Frequencies of 16

Total |

Gender	Major 1	2	4	5	Total
1	43	4.7777778 .42365927 27	4.2777778 .82644209 18	4.7058824 .46966822	
•	4.5428571 .50543267 35	4.5185185 .64273277 27	4.4375 .62915287 16	4.6491228 .64062548	4.5703704 .60521047 135
Total	4.6538462	4.6481481	4.3529412		4.6125 .58917182

anova I7 Gender Major Gender * Major

	Number of obs Root MSE		603785	R-squared Adj R-squared	
Source	Partial SS	df	MS	F	Prob > F
Model	2.17868632	7	.31124090	0.85	0.5440
Gender	.902604419	1	90260441	19 2.48	0.1170
Major	.543449451	3	.18114981	L7 0.50	0.6848
Gender*Major	.337409686	3	.11246989	0.31	0.8192
Residual	84.9416456	233	.36455641	L9	
Total	87.120332	240	.36300138	33	

Means, Standard Deviations and Frequencies of I7

 Gender	Major 1	2	4	5	Total
1	4.5909091 .49735027 44	4.7407407 .44657608 27	4.6111111 .69780234 18	4.7058824 .46966822 17	
2	4.4571429 .74133652 35	4.5555556 .57735027 27	4.625 .61913919 16	.65751869 57	1 .65647264
Total 	4.5316456 .6167625 79	4.6481481 .51970265 54	4.6176471 .65202277	4.527027	1 .60249596

anova I8 Gender Major Gender*Major

	Number of obs Root MSE		241 01391	R-squ Adj R	ared -squared		0.0612
Source !	Partial SS	df	MS		F	Pro	ob > F
Model	5.48992537	7	.7842750	52	2.17	(0.0378
Gender	3.77718043	1	3.777180	43	10.44		0.0014*
Major	1.12174513	3	.3739150	44	1.03	(0.3783
Gender*Major	.407058968	,3	.1356863	23	0.38	(0.7710
Residual	84.2694107	233	.3616712	91			
Total	89.7593361	240	.3739972	34			

Means, Standard Deviations and Frequencies of 18

Gender	_	2		5	Total
 !	4.6363636 .57429063 44	4.8888889 .32025631 27	4.722222 .57451315 18	4.8235294	.49878559 106
•	4.4857143 .56210887 35	4.5925926 .74726472 27	4.4375 .72743843 16	4.4561404 .68322176	4.4888889 .66766095 135
Total	4.5696203	4.7407407 .58873658 54	4.5882353	4.5405405 .64509082 74	4.6016598 61155313

anova I9 Gender Major Gender * Major

	Root MSE			1 ·	= 0.0166 = -0.0129
Source	Partial SS	df	MS	F	Prob > F
Model	2.26500531	7	.323572187	0.56	0.7866
Gender	1.01872762	1	1.01872762	1.77	0.1849
Major	1.27514656	3	.425048854	0.74	0.5304
Gender*Major	.070825762	3	.023608587	0.04	0.9889
1					

233 .576071336

.568706777

240

Means, Standard Deviations and Frequencies of 19

Residual |

Total |

 Gender	Major 1	2	4	5	Total
1	44	4.3703704 .79169478 27	.87820375 18		76001844 106
•	4.3142857 .63112545 35	4.1851852 .73573809 27	4.0625 .85391256 16	4.2807018 .79629468	4.2444444 1.74779943 1 135
Total	4.3670886		4.1470588	4.3108108	4.2987552 .7541265

134.224621

anova I10 Gender Major Gender*Major

	Number of obs			squared j R-squared	= 0.0890 = 0.0618
Source	Partial SS	df	MS	F	Prob > F
Model	10.5356374	7	1.50509105	3.27	0.0025
Gender	5.50416096	1	5.50416096	11.95	0.0007*
Major	3.98308736	. 3	1.32769579	1.88	0.1322
Gender*Major	1.79045507	3	.596818357	1.30	0.2767
Residual	107.815602	234	.460750437		
Total	118.35124	241	.491083982		- · - · · - · · - · ·

Means, Standard Deviations and Frequencies of I10

1	Major				
Gender (1	2	4	5	Total
1	44	28	18	4.8235294 .39295262 17	.60881667 107
2	4.2571429	4.222222 .69798244 27	4.25	4.5263158 .68413823 57	4.362963 74920263
Total	4.3670886 .71928054 79	4.5454545	4.3529412	4.5945946	4.4752066 .70077385 242

anova P1 Gender Major Gender * Major

	Number of obs			quarca	= 0.0679
	Root MSE	==	.92203 Adj	R-squared	= 0.0396
Source	Partial SS	d£	MS	F	Prob > F
Model	14.3039951	7	2.04342788	2.40	0.0216
Gender	2.71532752	1	2.71532752	3.19	0.0752
Major	6.34297801	3	2.114326	2.49	0.0493*
Gender*Major	.222557052	3	.074185684	0.09	0.9670
Residual	196.382197	231	.850139382		
Total	210 686192	238	885236103		

Means, Standard Deviations and Frequencies of P1

Gender	Major 1	2	4	5	Total
1	3.4285714 1.0625064 42	3.4285714 1.0338197 28	3.555556	•	3.3962264 .97276479 106
2	3.2647059	3.2592593	3.25	2.8214286	
	.75111326	.90267093	1	.89660253	
	34	27	16	56	
Total	3.3552632	3.3454545	3.4117647	2.8918919	3.2175732
	.93386576	.96644024	.89163272	.88468813	.94086986
	76	55	34	.74	239

anova P2 Gender Major Gender * Major

	Number of obs			quared R-squared	
Source	Partial SS	df	-	F'	Prob > F
Model	2.96873164	7	.424104519	0.45	0.8692
Gender	.003869326	1		0.00	0.9489
Major Gender*Major		3 3	.837941588 .15782727	0.89 0.17	0.4468 0.9181
Residual	219.280231	233	.941116871		
Total I	222 248963	240	926037344	~ _ -	

Means, Standard Deviations and Frequencies of P2

Gender	Major 1	2	4	5	Total
1		3.7407407 1.095185 27	3.444444 .9217772 18	3.3888889 1.0369009 18	3.5283019 1.025462 106
 		3.6296296 .79169478 27	3,5625 1.0307764 16	3.4464286 .93263347 56	3.4814815 9130223 135
Total	3.443038	3.6851852	3.5		3.5020747

O.

anova P3 Gender Major Gender*Major

	Number of obs	=	242 R-se	quared	= 0.0307
	Root MSE	= .8	851508 Adj	R-squared	= 0.0017
Source	Partial SS	df 	Ms	F	Prob > F
Model	5.3759108	7	.767987258	1.06	0.3907
Gender	.872969087	1	.872969087	1.20	0.2737
Major	2.09891734	3	.699639112	0.96	0.4100
Gender*Major	1.01449239	3	.338164131	0.47	0.7060
Residual	169.665412	234	.725065861		
Total	175.041322	241	.726312541		-

Means, Standard Deviations and Frequencies of P3

1	Major				
Gender	1	2	4	5	Total
1	3.8372093 .94944175 43	4.0740741 .87380362 27	3.8333333 .85749293 18	3.7222222 .7519039 18	3.8773585 .88050667 106
2	3.6666667 .82807867 36	3.7407407 .76422875 27	3.9375 .92870878 16	3.5964912 .82070634 57	3.6838235 .82284246 136
Total	3.7594937 .89464489 79	3.9074074 .83028794 54	3.8823529 .87955588 34	3.6266667 .80157503 75	•

anova P4 Gender Major Gender*Major

	Number of obs Root MSE			quared = 0.0280 $R-squared = -0.0012$	
Source	Partial SS	df	MS	F Prob > F	ŗ
Model	5.08980417			0.96 0.4618	}
Gender	.06043499	1	.06043499	0.08 0.7779)
Major	1.88911176	3	.629703921	0.83 0.4781	L
Gender*Major	2.90815337	3	.969384457	1.28 0.2823	}
Residual	176.611441	233	.757989016		_
Total	181.701245	240	.75708852		

Means, Standard Deviations and Frequencies of P4

1	Major				
Gender	1	2	4	5	Total
1		3.7692308 .81523946 26	3.3333333 .9701425	3.444444 .98352441 18	
2		3.444444 .69798244 27	3.5 .89442719 16		3.4779412 8070698 136
Total	3.3544304 .8628809 79	3.6037736 .76810513 53	3.4117647 .92499458 34	3.4666667 .92024282 75	3.4522822 .87010834 241

anova P5 Gender Major Gender * Major

	Number of obs Root MSE			uared R-squared	= 0.0165 = -0.0134
Source	Partial SS	df	Ms	F	Prob > F
Model	2.90397091	7	.414852987	0.55	0.7944
Gender	.043274656	1	.043274656	0.06	0.8106
Major	.544408725	3	.181469575	0.24	0.8674
Gender*Major	2.35314805	3	.784382685	1.04	0.3741
Residual	172.915357	230	.751805899		
Total 1	175 910329	237	741853704		

Means, Standard Deviations and Frequencies of P5

Gender	Major 1	2	4	5	Total
1	3.6097561 1.1374983 41	27		3.6111111 .69780234 18	.93556403 1 104
2	.82807867 36	3.5925926 .50071174 27	3.8666667	3.75 .87904907 56	3.7089552 80248324
Total 	3.6363636 .99880311 77	3.7592593 .69865599 54	3.7272727	3.7162162	3.7016807 .8613093 238

anova P6 Gender Major Gender * Major

	Number of obs Root MSE			quared R-squared	= 0.0278 = -0.0014
Source	Partial SS	df	MS	F	Prob > F
Model	5.00929826	7	.715614037	0.95	0.4662
Gender	.16649694	1	.16649694	0.22	0.6381
Major (3.54016657	3	1.18005552	1.57	0.1968
Gender*Major	1.36138837	3	.453796122	0.60	0.6126
Residual	174.891117	233	.750605651		
Total	179.900415	240	.749585062		

Means, Standard Deviations and Frequencies of P6

1	Major				
Gender	1	2	-	. 5	Total
1	42	4.0740741 .78082431 27	18	3.9444444 .7253577 18	.91667499 105
2	3.6666667 .95618289 36	3.7777778 .75106762 27	3.75 .77459667 16	3.8245614 .80451421	3.7647059 .82762753 136
Total	3.6410256	3.9259259	3.6764706	3.8533333 .78315601 75	3.7759336 .86578581

anova P7 Gender Major Gender*Major

	Number of obs Root MSE	= .87	241 17767	R-square Adj R-sc		= 0.0240 = -0.0053
Source	Partial SS	df	MS		F	Prob > F
Model	4.41286365	7	.63040909	93	0.82	0.5730
Gender	.344803426	1	.34480342	26	0.45	0.5042
Major	.762721778	3	.25424059	3	0.33	0.8037
Gender*Major	2.70810707	3	.90270235	57	1.17	0.3213
Residual	179.520746	233	.77047530)6 		
Total	183.93361	240	.76639004	11		

Means, Standard Deviations and Frequencies of P7

1	Major				
Gender	1	2	4	5	Total
	3.8809524 .94229561 42	.94431874	18	4.1111111 .67639954 18	.9600061 105
2	.7740842 36	3.9259259 .78082431 27	4.125 .8850612 16	3.8421053	3.9411765 .80521178 136
Total 	3.9487179	4.0925926 .87455689 54	4.0588235	3.9066667	3.9834025 87543706

anova P8 Gender Major Gender*Major

	Number of obs Root MSE	= .81	241 17497	-	uared R-squared	=	0.047	_
Source	Partial SS	df	MS		F	Pı	cob >	F
Model	7.68827353	7	1.0983247	79	1.64	· ·	0.124	1
Gender	1.75657423	1	1.7565742	23	2.63		0.106	3
Major	1.38892425	3	.4629747	75	0.69		0.557	3
Gender*Major	2.82535901	3	.94178633	37	1.41		0.240	8
Residual	155.714216	233	.66830135	57				
Total (163.40249	240	.68084370	07				

Means, Standard Deviations and Frequencies of P8

Gender	Major 1	2	4	5	Total
1	4.1190476 .80250768 42	4.037037 .89792417 27	3.8333333 1.0431852 18	4.2777778	4.0761905 87371046
2	4.0555556 .67377166 .36	3.8888889 .64051262 27	3.875 .95742711 16	3.7017544 .8229935 57	3.8529412 .77487788
Total	4.0897436 .74181066 78	3.962963		3.84	3.9502075 82513254

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anova P9 Gender Major Gender*Major

	Number of obs Root MSE		242 953927		quared R-squared	=	0.0309
Source	Partial SS	df	MS		F	P	rob > F
Model	6.78872597	7	.96981799	96	1.07		0.3863
Gender	.040934044	1	.04093404	14	0.04		0.8322
Major	1.32123284	3	.44041094	18	0.48		0.6937
Gender*Major	5.62911882	3	1.8763729	94	2.06		0.1060
Residual	212.934415	234	.9099761	L3 	u nov and two and and and and and		

241 .911714276

Means, Standard Deviations and Frequencies of P9

Total |

	Major				
Gender	1	2	4	5	Total
_ ·	3.4186047 1.1387662 43	3.7777778 .84731855 27	3.6111111 1.0369009 18		3.6132075 1.0006736 1 106
2	3.8888889 .94951951 36	3.6666667° .73379939 27	.8850612 16		
	3.6329114 1.0762853 79	3.7222222 .78708123 54	3.5	3.6533333	3.6404959 .9548373

anova P10 Gender Major Gender * Major

		Number of obs Root MSE		.898265		squared j R-squared	=	0.0312
	Source	Partial SS	di	É	MS	F	P	rob > F
_	Model	10.2352364		7 1.462	217663	1.81		0.0857
	Gender	7.10459017]	1 7.104	459017	8.81		0.0033*
	Major	1.54855346	3	3 .5161	L84488	0.64		0.5901
Ger	nder*Major	3.11960511	3	3 1.039	986837	1.29		0.2789
	Residual (189.616615	235	.8068	379215			
-	Total	199.851852	242	8258	334099			

Means, Standard Deviations and Frequencies of P10

Gender	Major 1	2	4	5	Total
1	3.9534884 1.1537411 43	4.3928571	4.3888889	4.2222222	.96280684
2	3.8888889 .91893658 36	.80064077 27	16		
Total	3.9240506 1.0472449 79	4.0909091		4.04	•

REFERENCE LIST

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Professional Experience

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9/98-2/99	Interim Assistant Dean for Business and Management Programs, Indiana Wesleyan University, Marion, Indiana
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1994-1996	Corporate Training Manager, Towne Air Freight Company, South
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1988-1992	Manager of Training Programs, Weil-McLain Company, Michigan City, Indiana
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