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Perceptions of training practices for recruiters in U.S. corporations recruiting at the University of Massachusetts/Amherst, fall semester, 1987.

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Perceptions of Training Practices for Recruiters in U.S. Corporations Recruiting at the University of Massachusetts/Amherst Fall Semester-1987

A Dissertation Presented

by

Cheryl Ann Stanley

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PERCEPTIONS OF TRAINING PRACTICES FOR RECRUITERS IN U.S. CORPORATIONS RECRUITING AT THE UNIVERSITY OF MASSACHUSETTS/AMHERST FALL SEMESTER-1987

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DEDICATION

This book is dedicated in loving memory of my aunt, Flora Iona Thomas, who through love, prayers and support inspired my thirst for knowledge.

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I would like to thank my committee members for their valuable contributions to this dissertation. Without their knowledge, expertise and guidance this dissertation would not be of the caliber that it is. A special thanks to my chairperson, Robert Wellman, for understanding and being sensitive to authors and their written work. I will never forget the week we "honed down" the dissertation.

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ABSTRACT

PERCEPTIONS OF TRAINING PRACTICES FOR RECRUITERS
IN U.S. CORPORATIONS
RECRUITING AT THE UNIVERSITY OF MASSACHUSETTS/AMHERST
FALL SEMESTER-1987

May, 1988

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This study examines the utilization of adult learning principles by corporate training and development programs. The adult learner increasingly has become a subject of interest within education. There are six adult educators/theorists - Lindeman, Knowles, Skinner, Tough, Kolb and Mezirow- who provide theories about how adults learn. Their works are examined, discussed and critiqued. Together, the six adult educators/theorists' works have been formulated into ten adult learning principles. These ten principles are the foundation for this study.

The literature on corporate training and development has identified U.S. corporations as the largest delivery

system for adult education. However, there is sparse literature on the training of recruiters in these corporations. This raises a concern. Recruiters are the "Admission Officers" of their corporations. They identify the raw material needed to keep corporations operating in today's competitive market. In addition, recruiters are the key determinants of who will benefit from the nation's largest adult education service.

A questionnaire surveyed 194 recruiters who represented 95 corporations which recruited on the campus of University of Massachusetts/Amherst during the fall of 1987. The purpose of the study was to examine the training and development of corporate recruiters. The survey was guided by seven hypotheses. In summary, the hypotheses stated that corporations' size was a factor in the utilization of the ten adult learning principles for the training of recruiters as well as in the amount of recruiter training. Additionally, age, sex and educational attainment influenced the recruiters' preference for twenty-four training methods and ten media resources.

The data was computed using chi-square and analysis of variance. The results showed that corporations are training recruiters and utilizing the ten adult learning principles in the recruiter training programs. In addition, recruiter's age, sex and education were factors in preferences for some training methods. The results suggest that although corporations are training

recruiters by principles of adult learning, they have not identified the principles and systematized them as a theoretical foundation from which recruiter training programs are designed and implemented. In order to meet the learning needs of the recruiters, this study also suggests that recruiter preferences in training be considered when designing training programs.

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CHAPTER I

INTRODUCTION

Training and development departments have been established in most corporations and are operating in full force. America's industries and businesses rely heavily on training to teach its personnel job related skills as well as literacy skills. Don F. Seaman (1972) stated in his article, "Adult Education in Industry - Evidence of a Positive Approach", that industries are realizing that job related training is necessary in order for employers to become more effective. Seaman adds that recent trends have reflected this realization by the implementation of educational programs in industries.

Pat Chaote (1982) stated that "twenty percent of American adults are functionally illiterate -- unable to read a job notice, fill out a job application, or make change. Yet the nation has no policy or program for dealing with this functional illiteracy" (Chaote, 1982, p. 1). Horn (1986) believes that employer's in-house training program's main thrust presently as well as the future will be combating illiteracy. She states illiteracy seems to be prominent among the American worker, suggesting there is a direct link between illiteracy and low productivity, low morale, absenteeism and safety.

Corporations believe that maintaining workers' competiveness is unquestionably a major reason for workplace training. Without trained personnel, companies cannot operate at maximum efficiency. Furthermore, training programs have been asked to assume many other responsibilities in the pursuit to keep American corporations thriving in the present and future economy. Doeringer (1981) stated some of these responsibilities are to remedy problems of low earnings and unequal employment opportunities by developing skills, facilitiating adjustment and improving economic performance. Training is also used by the union as an employee fringe benefit.

Doeringer (1981) also stated that because employees' values and expectations have changed, corporations' training and education programs are not managed in the same way as they were in the past. Corporations have increased the pace and appropriateness of their efforts, by adapting their training programs to the expectations of their employees' changing values. The educated "baby boomers" now occupying job positions are demanding continuing education. These demands have forced corporations to add to their training responsibilities. These demands have required an increase in training staff and size and money being spent on the training. Training programs are also using a variety of media and methdology as stated by Zemke (1987). But according to a 1986 training methods survey, workshop/seminar and

self-instruction are used most often. The American Society for Training and Development (ASTD) (1985) announced that corporations are spending close to $210 billions of dollars on formal and informal training. It was reported that most adults said they learn everything they needed to know to do their job during on-the-job training. ASTD also noted that employers are retraining about 70% of executives, professionals and technical workers. Gordon (1986) states that the people being trained are the top executives and middle managers. Gordon quoted an estimate of 69% of all organizations will provide some type of training to middle and upper management and next in line will be the production workers. It appears, ASTD (1985) further reported, that training picks up where formal education leaves off, providing most skills after the age of twenty-five and all the skills for two out of five jobs.

The increase in employees participating in training has been noted. Gordon (1986) stated that according to the Bureau of Labor Statistics, U.S. organizations with fifty or more employees have formally trained an estimate of 36.5 million people in the year of 1986. He stated that the total number of people informally trained was not stated, however "the size of that one is anybody's guess" (Gordon, 1986, p. 49). Carnevale (1986) stated that employers provided at least 17.6 million formal courses each year to almost 15 million trainees. He stated that

an estimate of one out of eight American workers participates in formal training each year in the workplace. In the same publication, "The Learning Enterprise", Carnevale stated that most training occurs in-house, however, and only about one-third is done outside. The outside providers are the colleges and universities. Future trends see the schools playing a more prominent role in training. Corporations have already developed partnerships with colleges and universities.

Not only have corporations gained support from educational institutions, they have also gained support from within towards training. Managers, in particular, are supporting training because:

1. companies are growing in size and resources;
2. managers are having positive training experiences;
3. training and development departments are increasing their status as a growing profession in education and training activities; and,
4. training managers are effectively selling their programs to top management.

To add another thought, Naisbett and Abundene (1985) stated that trends indicate there will not be enough people to hire by the year 2000 to fill all the new jobs being created. Therefore, the following will take place and rally support for training from managers: (a) the elderly will not be forced into early retirement, and;

(b) the women, minorities and the poor will be hired. Naisbett and Abundene add (1985) that not only will these groups profit from the labor shortage but corporations will support as well as demonstrate how swiftly and effectively they can train human capital when it is desperately needed.

The size of business facilitating employee-learning is impressive. It is impressive both in terms of expenditure and the number of people delivering and receiving it. The challenge for training is to prepare America's worker for the information age and service economy. It is important for corporations to take the responsibility to teach employees to think, to learn and to create because these are the necessary business skills in an informed society. ASTD (1985) reported that employees will demand to be trained because:

1. employees today are accustomed to education;
2. employers have union contracts that require education and training;
3. some forms of training are mandated by the government;
4. employees values and expections of a job are changing; and,
5. "baby boomers" recognize the need for continuing education.

For these reasons, training and development is an essential component of a corporation's livelihood; it has

become a means to an end.

As well, corporate education has become the largest delivery system for adult education. Is is important to note that while employer training was evolving and becoming the largest delivery system for adult education, the adult education field evolved in the education arena. Adult educators offered principles of adult learning which provided understanding of how adults learn. Educators and trainers were now able to design curricula that spoke to the learning needs of adults.

As the education of adults came into the forefront from both the public and private sectors, there was another important phenomenon happening. Career placement offices expanded their services in order to assist the number of diverse students graduating from colleges. As a result, career placement offices came to be a target area where corporate recruiters could select prospective employees from a pool of qualified job applicants. As more corporations were experiencing success in recruiting on college campuses, the number of recruiters had increased. Consequently, recruiters played a significant role in determining the work force of their companies. In addition, the work force selected by the recruiters dictated the educational services to be provided by their corporate training departments.

Along with corporations establishing relationships with college career placement offices to select

prospective candidates, these same corporations put tremendous energies in training the raw material from these colleges. In developing the training programs and thus becoming the largest delivery system of adult education, there appears to have been less efforts put forth by corporations to establish relationships with adult education departments on these same campuses. This is not good because after all, corporations are training a large number of adult learners. The adult education field offered principles of adult learning. The adult educators believe if these principles are used by educators/trainers their educational programs will be relevant to the learning needs of the adults and, thereby, will improve the adult learners' performances so that adults are able to compete in today competitive economic market.

Background

In this section, a brief historical survey will illustrate how corporate training shifted from the "how to" training to training that emphasized skill upgrading in order to keep corporations at a competitive edge. Employee training played a major role in the growth of U.S industry. Its roots can be seen at least as early as the writings of Pestalozzi and Rousseau.
(Violas, 1978)

Pestalozzi and Rousseau believed education should do

more than train the mind. Manual training should be added to the curriculum, whereby the students would learn activities such as leather work, wood work, drawing and other skills that would give them a better understanding of the world. However, Pestalozzi and Rousseau's objectives were not to propose a curriculum that would prepare students for specific job skills to match specific occupations. Their aim was to enlarge students' educational experiences.

Years following the Civil War, the commercial community saw manual training as a way of producing more efficient workers. Entrepreneurs believed that the skills and principles the students learned would have specific transferability to an industrial and/or a commercial job. However, in the 1890s the employers began to question the reality of transferability. By the turn of the century, their support for manual training had changed. Employers began supporting a more vocational type of training. Thus, a paradox existed. Rousseau and Pestalozzi influenced the growth of vocational education not for reasons to serve industrialism, but rather for educational reasons that were addressed by them.

Gilbert J. Black (1979) stated that the popularity of vocational education in American high schools dated back to the late nineteenth century. This popularity grew because of the growing use of complex machinery and the migration from the farmland to the city. As a result,

some type of training was needed to skill workers for the nation's economy. The amount of training necessary and the number of workers to be trained was more than the public schools could handle. Corporations had to step in and establish their own training schools. Westinghouse Electric and Western Electric Company were two corporations first to establish training schools.

As the history of training evolved, the American society counted on workplace training to perform many functions. Workplace training was a major vehicle in preparing the society for war. Training was utilized in order to teach workers the necessary skills needed to equip the American society for war. Workplace training also played a major role in the transformation of our country into an industrial society. Additionally, as training evolved there came a long history of federal policies regulating training. Three historical periods were highlighted, marked by the years-1862, 1963, 1971. Doeringer (1981) stated that these dates had a favorable impact on workplace training and education. In 1862, the Morrill Act was enacted, establishing land grant colleges for vocational training programs for agriculture. Later, an Vocational Education Act was enacted in 1963. Several large-scale federal funding for education and training followed. These federal fundings for education and training came through the GI bill, the National Defense Education Act, the Manpower Development Training Act and

the Comprehensive Employment and Training Act, allowing people to benefit from education and training. In 1971, vocational education for industry and trade was receiving federal assistance.

While much of the training was done in formal school settings, a larger portion was done in the workplace. Craft unions were among the earliest to organize workplace training. Industrial apprenticeship programs were also an important element of workplace training. These apprencticeships trained the skilled mechanic who was needed to operate and repair much of the nation's industrial machinery. The military also placed heavy emphasis on another type of workplace training. In order to prepare soldiers for World War II, soldiers were taught high level skills. The majority of their training was technically oriented. The military had the responsibility for adequately training unskilled recruits and officers to assume positions in military units.

The evolution of workplace training can be seen in the following. Starting with the ideas of Rousseau and Pestalozzi, the intent of manual training was to give children skills that would better prepare them for a world after school. Their thoughts were later carried over into vocational type training. The focus of this training moved away from the child and school and was directed to the adult and the workplace. Industries were interested in vocational training in order to prepare workers for an

industrialist society. Industries then found themselves preparing their workers to meet the demands of WWI and WWII.

After WWI and particularly WWII, discharged service men and women decided to use their skills they had developed during the wars. Enlistees went to companies and applied those learned skills. Many went back to their colleges in order to find employment. This had a significant impact on the establishment of college placement offices, college placement associations, and recruitment. College Placement Council (1962) stated that placement offices began in 1919 after the end of WWI. For example, Yale University aided its alumni after they had returned from the armed services by providing employment services. Other college placement offices were established to serve the same purpose. At this time, companies did not send recruiters. Placement directors contacted the employers. The directors matched the skills of the men to the employers. Because of the impact of the two wars on college campuses, resulting in the emergence of placement offices on college campuses, a group of personnel people met together to discuss the problems in the field of vocational guidance. In 1926 a second meeting was held at the Massachusetts Institute of Technology. This was the origination of college placement associations. At MIT, the group named Eastern College Personnel Officers was estasblished. This association

began the first regional placement activity in the U.S. They became the forerunners for the other associations to follow.

Stephens (1970) stated as the history of college placement progressed, colleges were showing concerns for the job needs of all their students. However, not until WWII did college placement experience tremendous growth in services. WWII had put pressure on the manpower needs in the national defense area which forced college placement to help employers find employees. Placement was now servicing a large number of students as well as employers. College placement's service to their colleges, students and employers continued to increase well after the post WWII period. With the population explosion after this war, and the desire for the veteran to utilized his/her training from school and the war, college placement offices were widely accepted and utilized by both the student and the employer. College placement offices became a place were information was exchanged, the student about him/herself and the recruiter about the company.

Between the years of 1949 through 1956, college placement offices deemed it necessary that their programs become more systematic and comprehensive in career counseling in order to service their college campuses. Placement directors and employers also believed it was necessary for a systematic recruiting procedure to be established so that any unethical recruiting practices

could be eliminated. In 1956, a code of ethics for college recruiting was discussed and resolved. The outcome of this discussion resulted in the Principle and Practice of College Recruiting. In 1957, recruiting was at a high. Employers had increased the pace of recruiting. Additionally other placement services were established and/or elaborated to meet the growing demands of businesses, government and industries. The college placement offices had to make another change in the way they provided services to their colleges.

In the sixties, American society at large went through a period of social unrest. Stephens (1970) stated this period had an effect on students' ideas concerning education and work. Students were not interested in the benefits of education and they were protesting the depersonalization of big businesses. As a result, Stephens adds that students were looking for college placement offices to give them counseling and guidance in order to find direction and understanding in what they wanted to do.

The 1970's reflected the ideals of the sixties. These ideals had been mainstreamed into our society. College placement offices had to make changes in order to address issues such as an age of affluence, a philosophy of education for all, an emphasis on graduate study and, a need of many students to become economically independent. Consequently, placement offices were doing career

development and planning among the other responsibilities of assisting students in finding employment. Because placement was providing several services, professionalism became an issue. Professionalism became an issue not only for the staff but also for recruiters. It became apparent that professionals in this area must be well trained and competent, must be able to understand current work relevant to his/her field, must have knowledge of the labor market and must appreciate the developmental stages of career life. This was also expected of recruiters; however, the crucial concern for recruiters was adequate training, particularly in the area of selection interviewing.

The changes college placement offices made From 1919 through the 1970's were just a small example of the changes major institutions made in our society. A much larger illustration is the educational system of the nation. Jarvis (1984) stated that as a result of the sixties our society was in a state of "malleability". This was when innovations occurred and social change was possible. These innovations were witnessed in our education system. The education system made changes in the structure of its curriculum. The curriculum changed from subject-centered to learner-centered. This type of curriculum was termed the "romantic" curriculum. The romantic curriculum focused on self-development, self-expression, experience and project work as well as

other learner-centered activities. It was also during this time that andragogy i.e., the art and science of teaching adults, became popular. Jarvis adds that because innovations were occurring and being accepted during the romantic period, andragogy was able to emerge and be widely accepted as a theory on how adults learn. Thereby andragogy was the accepting of adult learning principles and constructing adult education curriculum based on these principles. Andragogy's curriculum (adult education) was based on the romantic curriculum, the learner-centered approach. There were many questions if, in fact, andragogy was a "theory" about the adult learner or "assumptions". In spite of the debate, Knowles (1984) stated that during the late sixties and seventies andragogy had inspired many adult educators/trainers to research and publish articles reporting application of its use in the classroom and in the business setting. In this way Knowles suggested that andragogy was a "theory" useful in understanding the adult learner. Many adult educators continued to recognize andragogy's principles on how adults learn as a legitmate philosophical approach to teaching the adult learner in any setting. Today, the literature suggests that andragogy and other adult learning principles are used by adult educators/trainers as the foundation in which curricula are designed and implemented.

It appears the sixties and the seventies had a major

impact on the structure of our education system . One measure of change is noting the point that departmental structures within this system had to change and adapt. Because of the innovations of the seventies, attention was directed toward the adult learner, thereby recognizing the field of adult education. In addition, there was a second change in which college placement offices had to expand and address the new ideology of "career development and planning". These college placement offices additionally incorporated a systematic and comprehensive recruiting program for the number of corporations recruiting on college campuses.

It is apparent that there has been a shift of emphasis training made from the early thoughts of Rousseau and Pestalozzi. Training at one time was considered an extention of a school curriculum, benefitting the child for work at home. Today, training is an integral part in major corporations. Education and training is benefitting the corporations by contributing to their success as well as the recruiter and employees in general by providing further education opportunities to upgrade present skills.

Statement of the Problem

By virtue of the shift in the nineteenth century of manual training to the late twentienth century practices of workplace training suggested in the previous section,

modern corporations have found themselves contending with new kinds of problems. These problems are legion: e.g., (a) rapid technological change; (b) global competition; (c) deregulation; (d) changes in the business environment which requires new skills and knowledge from their employees; and, (e) companies trying to gain competitive strength in the marketplace. Because of these kinds of problems, corporations have entered the education field, largely out of necessity. In the past, when businesses needed a worker, they went to a vocational school. The pressure of today's economy, deregulation, global competition, and the like disallow corporations the time to wait for a worker to complete a vocational program. Corporations have been forced to set up there own education system, resulting in the largest delivery system for adult education.

Corporations need raw material for their work force. In that raw material, they need people who can respond to rapid technological change, global competition and similar facts of modern society with intensive re-training and education potential. This raw material comes from careful personnel recruitment. Here, the recruiters becomes pivotal not only in recruiting the work force to do a job but more importantly, recruiting a work force that is flexible, open to change, able to re-educate itself and develop skills as the modern market demands. In this sense, corporate recruiters are the admissions officers

into the corporation sector.

In this study, I will focus on the recruiters from the corporate sector. It is important to show the crucial element they play in corporations' successes. Surprisingly, there is a scarcity of documentation about the training of corporate recruiters. This is unfortunate. As suggested earlier, recruiters are in effect the admissions officers for the corporate work force and its education system. Recruiters provide their training and development departments with educable students who can learn to adapt to changing circumstances and technologies and provide the labor energy for survival in a rapidly changing economic, political and social world. To a considerable extent, recruiters bear the responsibility for enlisting the cadre of employees which, in the contemporary corporate scene, is tantamount to determining the nature of the work force in corporations and the raw material for the nation's adult education institutions. Based on the type of applicants recruited and selected, recruiters are key in determining the type of adult education services that will be provided by corporate training and development programs.

Given this state of affairs, it is obvious that recruiters need to know education counseling and principles that underpin adult education. When we look at the nature of the recruiter, they are not professionally trained. The people selected to recruit are usually

people who know the corporate image and structure and will select candidates to fit the corporate mold. The foregoing analysis suggests that recruiters need to know more about the interviewing process, the principles of adult education and education counseling so they will intelligently chose people who not only fit the corporate mold but also who are flexible and educable so they can respond to the kinds of problems facing modern corporations. If only for this reason, it would seem important for corporate recruiters to be well trained in selection interviewing, education counseling and placement as well as the principles that undergrid the adult education enterprise.

A review of the literature suggests two things. First, there is a paucity of training available for recruiters. Second, even when training occurs, there is little recognition of the training and education involved in their job. Regardless, it <u>is</u> apparent that the training that actually occurs in corporate training is in fact based on sound adult learning principles. In others words, perhaps unknowingly, training practices utilized by corporations address the needs of the adult learner. It is worth questioning, therefore, the extent that recruiters are aware of these principles and whether they are used in their professional training. This may suggest how and in what areas recruiters can be trained for better performing their functions as adult education counselors

and admission officers.

Purpose of the Study

The purpose of this study therefore is to examine the training and development of recruiters who are currently designated as recruiters for their corporations. The group chosen for investigation is composed of 194 recruiters representing 95 corporations. Recruiters were sent to the University of Massachusetts/Amherst to recruit during the fall 1987 recruiting cycle, October, November, December. Of those recruiters who recruited during this period, the majority came from manufacturing type companies.

It is the intent of this study to do two things. First, a careful review of the adult education literature will be conducted in order to present sound adult learning principles. Because the literature only suggests what adult learning principles might be used by corporate trainers to train their recruiters, the adult learning principles presented in the literature review will serve as a checklist for corporate trainers to verify what principles they are, in fact, using. Second, this study will survey the corporate recruiters to determine what kinds of practices they find effective in their own training as recruiters; and, whether these practices are in accordance with sound adult learning principles. This

will provide a base for corporate trainers to develop training programs for recruiters that are effective.

Hypotheses

The literature suggests when adults are involved in a learning situation they have preferences for the way in which they are taught. Females were said to prefer andragogical techniques because these techniques are group oriented. It is stated because female are socialable and like discussion type activites more than males, females are more likely to choose group oriented activities rather than a lecture type activity. This can also be said for age and level of education. As adults grows older, they acquire knowlege and experiences that enable them to take charge of their own learning. Therefore, self-directed learning activities are more appealing. (Lovell, 1985; & Berg and Poppenhagen, 1985) The literature does not only suggests that the adult learner has preferences for learning methods but also, corporate training programs' design and delivery and the classroom style used to train their employees are directly related to corporations' size. (Zemke, 1986) It is also interesting to note that corporations are training a large number of employees but little attention is directed toward the corporate recruiter. (Crofts, 1985; & Walters, 1985) Based on this information, the following hypotheses will be

investigated:

1. Females preference for training methods are different from males.
2. The higher level of educational attainment the preference for training methods are more self-directed.
3. The older the adult learner the preference for training methods are more self-directed.
4 Training recruiters by principles of adult learning is related to the size of a corporation.
5. The size of a corporation is related to the amount of training directed towards recruiters.
6. The type of corporation is related to the amount of training directed towards recruiters.

Significance of the Study

As the preceding shows, corporations have placed a heavy emphasis on the training environment. As a result, they train enormous numbers of employees and have become the largest delivery system in the nation for adult education. Corporations have at their disposal a wide variety of training methods and materials to enrich the learning experience of its employees. This study will attempt to show corporations how to enrich their employees' learning experiences when providing training to them. I will do this by presenting the adult learning

principles most often used by corporations to train recruiters and showing the trainig activities that correspond to the principles of adult learning. The information presented in this study will give training managers a basis from which training curricula can be designed to meet the learning needs of their recruiters as well as give guidance in which viable training of recruiters can proceed. Although this study focuses on recruiter training, corporate trainers will find the information in this study applicable to employee training in general.

Limitations of the Study

The researcher sets forth the following limitations:

1. Corporations will not be randomly selected.
2. The population surveyed will be the recruiters who are sent by the corporations to the University of Massachusetts at Amherst. This may not give an accurate perspective on the training received by recruiters for which training practices are utilized to train them.
3. Because of the cyclical nature of recruiting, only the corporations that come to the university from October to December will be surveyed.
4. Because of the amount of money spent on recruiting, only those corporations who have a

recruitment budget will send recruiters to the university. In addition, most of the corporations recruiting at the university are from the New England area. Therefore the information provided is not representative of all corporations.

5. Recruiters' information on training practices used in training and development is based on their perceptions.
6. Recruiters who are sent to recruit at higher educational institutions are not all "trained" recruiters. Therefore, the information received is knowledge of training practices they have witnessed from other areas.
7. The study will not witness any training practices/methods employed in corporations.

Definition of Terms

The terms listed below are defined as they will be used in the study. In some cases, alternative definitions may be found in social sciences and training literature since concepts are used to fit the theoretical framework of a particular study.

In-house training - any formal or informal learning activity conducted by the training department of a corporation as opposed to an outside consultant.

Training can be either on site or at other facilities.

Informal training - any training/learning activities non-academic related conducted in-house.

Formal training - any training/learning activities, usually academically related, conducted in conjunction with a higher educational institution.

Recruiter/adult learner/trainee/employee - a person working a at corporation who has attended a training workshop. For the purpose of this study these terms will be used interchangeably.

Workshop/Seminar - a training class/activity conducted by a trainer.

Methodology - a set of procedures or methods use to implement a learning activity.

Trainer - the person who delivers the training/learning activities to the trainees.

Adult Education - learning activities, facilitated by an an adult educator/trainer in order to impart knowledge, attitudes and skills, which are designed and implemented to address the "macroscopic" problems of the audience while meeting the needs and interests of the individual adult learner.

Corporation size - the number of employees working for the corporation.

Corporation type - the general characteristic of a corporation, e.g., research, manufacturer, government, retail and communications.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Demographic trends show society is becoming older. People in their middle and later years are outnumbering those under twenty five. Elinor Lenz believes that as a result adult education has become the fastest growing sector in American education.

> adult students are being referred to as the new majority. Current indications are that this trend will continue through the 1980's aided and abetted by such social changes as the expanding movement of women into the workforce; evolving attitudes toward the needs of minorities, the elderly, and the handicapped; and the need for retraining to meet the demands of new technologies. (Lenz, 1982, p.IX)

These social changes have fostered a growing interest to accommodate °the new majority' by adult educators. The numbers of research studies on adult education have grown from the 1950's and continue to grow presently. These studies have produced large amounts of information on adult learning, adult education, adult development and recently gerontology. These studies have had a major impact on views of how to teach adults.

As a result of "the new majority" now matriculating

in adult education classrooms, an adult educator should be aware of the body of knowledge addressing adult education so that he/she can better serve the diversified needs of their adult learners. Therefore, the adult educator must incorporate a new syllabus of teaching methods and techniques in his/her curriculum design. This new syllabus must have a solid theoretical grounding. The theoretical grounding should be based on how adults learn.

In an attempt to examine literature on how the adult learns, a literature review was conducted. Part one of this review, articulated the adult learning theories that provided insight on how the adult learns. These theories were translated into ten principles of adult learning. Part two review of the literature was conducted in order to provide a short review on the training of recruiters. Recruiters training practices were examined to find out what type of methods and curriculum best suit the needs of the recruiter and what adult learning principles are being utilized, if any, in the design and implementation of training for recruiters.

Part I

In reviewing the literature on adult learning, to my surprise, the literature revealed that there is a scarcity of adult learning models and there is no one adult learning theory. The adult education literature

states why there is a scarcity of adult learning models and no one adult learning theory. The literature also states that because of these deficiencies, adult educators believe this is a shortcoming to the field. Lovell, Cross, Gibbs and Simpson state their reasons for the lack of an adult learning field and/or why this is a shortcoming.

Lovell (1980) stated that in the development of psychology, it was not possible to provide a comprehensive and integrated theory of how human adult learning comes about. What does exist are pieces of information collected from major psychological and educational learning theories. However, these theories were often developed from experiments done with children and/or animals which made them relatively inapplicable to the adult learner. There was no consideration for the diverse conditions in which adult learning took place nor the many influences that affect the adult learner. Consequently, adult educators/theorists interested in how adults learn extrapolated from the psychological and educational learning theories and applied those theories they believed to be most appropriate based on their observations and experiences working with adults.

In her book, Adults As Learners, Patricia Cross (1986) comments on the lack of an adult learning theory. She believes not having an adult learning theory is a

shortcoming to the field of adult education. She states,

> . . . the profession of adult education cannot advance beyond its present stage of development if one generation of adult educators simply passes on what it has learned through experience to the next generation. Such an approach results in a static, if not downright stagnant, profession, because each new generation of professionals simply catches up with the preceding generation rather than forging new frontiers of knowledge. The systematic accumulation of knowledge is essential for progress in any profession. In an applied profession, however,theory and practice must be constantly interactive. Theory without practice is empty, and practice without theory is blind. (p.90)

This is a shortcoming because adult educators/trainers need to have a body of empirical data that specifically pertain to the learning needs of the adult learners since adults have increased in attendance for education and training. Gibb (1960) suggested that the adult educator should be cognizant of the existing empirical data on learning and the constraints of applying these learning theories to the adult learner. Edwin L. Simpson (1980) stated in his article, "Adult Learning Theory: A State of the Art", that as the learners get older there appeared to be no existing comprehensive learning theory that suffices for the divergent learning episodes that the adult experiences throughout a lifetime. Simpson believed the adult educators or experts were unable to articulate an adequate theory for how adults learn. He believes this

is not a shortcoming. What is known about adult learning and the many perspectives used to understand the adult have addressed the diversity of the learner. Simpson stated that if adult educators/theorists try to reduce these perspectives to one definitive theory, this will lose the richness that these perspectives bring in addressing the diversity of the student. Additionally, Simpson (1980) suggested as a result of a lack of an adult learning theory, adult educators can overcome this shortcoming by:

1. extracting from the literature those theoretical concepts that have been sustantiated and give the adult educator some assurance of their use with adults;
2. specify the conditions or contexts under which the concepts are most applicable; and,
3. identify those concepts that have not yet been explored and demand attention in the pursuit of more functional adult learning theory.

Thus there is a need to discuss adult education and an adult learning theory. Lovell, Cross, Simpson and other adult educators raised issues they believed needed further attention in this field. The issues raised were:

1. How is an adult learning theory built?
2. How do adults learn?
3. How is adult learning different from childhood

learning?

4. Is there enough research on how adults learn? If so, what are the applications? If not, which areas are lacking?
5. What motivates the adult to learn?
6. How do developmental changes effect the learning process?
7. Is andragogy effective when learners have been taught the pedagogical model all of their learning years?
8. How feasible is the andragogical model based on institutional constraints such as philosophy, time and other resources?

In reviewing of the literature, I will articulate "theories" by four theorists/adult educators who have studied the adult learner and have attempted to construct an adult learning theory and two theorists' theories that have been adopted by adult educators. First, before doing this, one must keep in mind what is an adult, what is learning and what is a theory. For a definition of adult, this task was somewhat difficult because the literature did not provide a consensus on what is an adult. In spite of the disagreement, and for the purpose of this study one could define adult as a fully developed human being whose learning needs become more focus and are actively sought out to satisfy. As it was the case with defining an adult, defining

learning was difficult because many resources stated there are no simple definitions of learning. However, for the purose of this study, learning is defined as the knowledge, skill and attitude obtained by instruction. For a definition of theory, theory is define as evidence in support of a formulated general principle or principles. The definitions presented are only of many which are presented in the literature. In summary, when attempting to define adult, learning and theory, one can assume that:

1. If learning takes place, it will result in a change of the learner's attitude, knowledge or skill;
2. The existing learning theories do not not address the diverse conditions in which adult learning takes place nor the many influences that affect the adult; and,
3. Based on the definitions of adult, learning and theory, the existing learning "theories" do not constitute an adult learning theory. Therefore, a comprehensive adult learning theory is needed.

Eduard C. Lindeman and Malcolm S Knowles

Andragogy

Lindeman's and Knowles' "theories" will be presented in order to look at the historical context of andragogy

in their attempt to develop a theory of adult learning based on this concept. When we hear the word "andragogy" most often we think of Malcolm Knowles. Nevertheless, the concept of andragogy was first introduced in 1833. Alexander Kapp, a German grammar school teacher, used andragogy to distinguished it from pedagogy, the art of teaching children. Kapp referred to andragogy as the normal and natural process of continuing education for adults. Andragogy became intriguing around this time because it was a concept which addressed the "adult learner" as well as the means by which an adult learns. A few years later, other European philosophers began to use the word. German philosopher Johan Frederick Herbert was said to oppose the usage of andragogy but acknowledged it as a practice. Andragogy was forgotten for sometime but it later came back to the forefront in 1921. At this time Eugen Rosenstock, a German social scientist, used the term andragogy in a report addressing the Academy of Labor in Frankfort. He believed that adult education required special teachers, special methods, and a special philosophy. Rosenstock stated,

> . . . it is not enough to translate the insights of education theory[or pedagogy]to the situation of adults...the teacher should be professionals who could cooperate with pupils; only such a teacher can be, in contrast to a pedagogue, an °andragogue'. (Knowles, 1978, p. 19)

In the nineteen fifties, it appeared the concept of

andragogy had some significance on the European's adult education. Many books were published about this concept, i.e., Andragogy: Nature, Possibilities and Boundaries of Adult Education (1951) Heinrick Hanselman; Introduction to Andragogy: Basic Issues in Adult Education (1957) Franz Poggler; and Problems in Andragogy (1959) M. Ogrizovic that assisted in an appreciation of the andragogy concept.

During the early nineteen hundreds, very few books were written in the U.S. discussed andragogy. However, articles appeared in periodicals during this time. These articles dealt with the application of andragogy to management training, religious education, social-work education, and undergraduate and graduate training. This American consideration is just a brief part of andragogy's long history. Too often we hear of andragogy only in connection with Malcolm Knowles. The literature does credit him for popularizing andragogy in the U.S. but, one must remember andragogy's root stems much further back in the years.

> Knowles should more properly be ackowledged for reintroducing and popularizing andragogy in the United States. His publications and presentations are largely responsible for the development of andragogy as a legitimate approach to adult education. (Davenport and Davenport, 1980, p. 6)

In their article titled, "Knowles or Lindeman: Would the Real Father of American Andragogy Please Stand Up", Davenport and Davenport (1980) stated that Eduard C.

Lindeman along with Martha Anderson introduced andragogy to the U.S. in 1927. Under the title, Education Through Experience, Lindeman and Anderson presented the concept in a chapter titled "Andragogy" of their book. Yet, Lindeman and Anderson failed to develop andragogy as a theory; consequently, the word had little apparent effect on adult education as a theory or a practice. In their article, Davenport and Davenport (1985) take a direct quote from this section to show the similarities between Knowles' theory and Linderman and Anderson's theory. The authors advise, "...this quotation should be examined closely since Lindeman's °new technique for learning' bears a striking resemblance to Knowles conceptualization of andragogy" (p. 4).

The Meaning of Adult Education, written by Lindeman in 1927 was examined by Davenport and Davenport in 1980. In the chapter titled, "For Those Who Need To Be Learners", Lindeman defined what adult education is and what it should be about. He defined adult education as a never ending process, "The whole of life is learning, therefore education can have no ending" (p. 5). Lindeman maintained that adult education should put meaning into the whole of life. It should begin where vocational education leaves off. Lindeman proposed four desirable features of adult education:

1. Adult education is situation oriented. The curriculum is built around the needs and interest

of the students. Here, the teacher should recognize the primary importance of the learner. The teacher uses the student's situation as a guide for teaching thereby giving the teacher and textbook a new role.

2. Adult education recognizes the value of the learner's experiences. Lindeman believed the most valuble resource for learning is the learner's experience. Experience is the adult learner's living textbook.
3. Adult education recognizes the need for individualized instruction. If we teach adults like we teach children, using the methods and setting the same goals for all children, we are not recognizing the individuality of our students.
4. Adult education recognizes the reasons for adults wanting to learn. Educators must give meaning to what adults strive for, the goals they set for themselves and the wants, needs and desires they have.

Lindeman summed up his chapter by pointing out that adults want their experience to be recognized and counted for. Adults want their talents to be utilized. He continued by saying adults especially want to improve who they are and what they are doing so that they can be contributors to their communities and the society at

large. As one can see, Lindeman emphasized (a) the importance of experience, (b) individual instruction (or self directed instruction), (c) motivation, and (d) learner-centered curriculum.

Malcolm Knowles, an adult educator, also acknowledged the learning needs of the adult learner. He credits Lindeman for recognizing the uniques characteristics of adults as learners and the different methods and techniques to be employed when teaching adults. Lindeman's influence on Knowles thinking is witnessed in his writings about the adult learner. In 1968, Knowles began to write articles about the adult learner, prescribing a curriculum similar to Lindeman. Later, Knowles (1970) collected his thoughts and research into a book entitled, The Modern Practice of Adult Education: Andragogy Versus Pedagogy. Knowles presented andragogy and pedagogy as two different concepts of teaching for adults and for children. He proposed four basic concepts that differentiate pedagogy from andragogy. Knowles first commented about the education system. He believed the present education system was not keeping up with the advancing technology of our society therefore, education is not meeting the learning needs of students for today. In addition, he stated that very little learning was taking place. Knowles goes as far as to say that most learning occurs in nursery school through the second grade. From this

point on, it is unproductive:

> . . . this is because the forces at work on learners from about second grade on have very little to do with learning. Most of them have to do with achieving-passing test, scoring high on SATs, getting into college (or graduate school), or qualifying for a job. (p. 39)

Knowles noted that this particular agenda does not always develop the attitudes, skills and competencies necessary to function in our technogogical society as well as develop students into healthy, thinking and productive human beings. This is of importance to the adult learner. Teacher who taught adults the way they had taught children were posed with difficulty in their approach and focus. Teachers found themselves deviating and using other approaches to keep the interest of their students. These approaches were soon to be foundations for theory and technology based on teaching adults.

In The Modern Practice of Adult Education: Andragogy versus Pedagogy, Knowles laid down four assumptions about how children are taught along with a contrast on how adults can be taught through the andragogical approach.

1. The self concept of a child is dependent upon his/her interaction with the environment. As a child matures into adulthood, he/she becomes autonomous. In an andragogical approach, the teacher regards the learner as one who can take direction in the learning. The student is viewed

as a self-directed learner.

2. A child's experiences are very few. Children are relatively new to experiences. Adults, on the other hand, have accumulated many experiences in the course of their lives. In the andragogical approach, the experiences of the learner are guides for the teacher and learner in designing the learning activity. The experience of the adult is valued as important.
3. When teaching children, the teacher is committed to teach according to a prescribed curriculum. In the andragogical approach, curriculum is designed around the interest and needs of the learner. The teacher's role changes from the authority on learning to a facilitator. This role is that of a resource person, helping the learner to identify his/her learning needs.
4. Children are given information from teachers via subjects for future use. Students receive various information from teachers and books that usually may or may not applied until they are out in the working world or in the course of their lives. In the andragogical approach, the learner's curriculum emphasizes problem solving and problem finding of the present. What the learner wants to know now, and what he/she want to improve, are the immediate concerns of the

learner and the teacher so that the adult learner can perform efficiently at a present task.

Additionally, Knowles spoke on the role of the adult educator in the andragogical process. Knowles sees the role of the adult educator as:

1. helping the learner diagnose his/her needs;
2. helping the learner identify his/her experiences that will enhance the learning;
3. motivating the learner to learn;
4. selecting methods and materials that will produce the learning;
5. producing the resources necessary to direct learning; and,
6. helping the learner to evaluate his/her learning process.

Knowles (1970) stressed that adult educators must be able to distinguish between the needs of the adult and the interests of the adult. The needs of the adult are the focal point of the learning. He did not claim that adult's interests were not important but satisfying an adult's needs should be the mission of the adult educator.

> Interests are relevant to the adult educator's technology, but in relation to his mission we are talking about something different and fundamental-indeed, about something which individuals are less conscious than they are of their interests. We are talking about more ultimate needs and goals of human fulfillment. (p. 50)

It is then necessary to assist the adult learner in finding his/her level of needs in addition to assisting the learner in finding out what is required to gratifying those needs. This inquiry requires the skill of the learner and the facilitator to know how to ask the appropriate questions and for the learner to find the answers for him/herself. In order for this inquiry to be successful, one must consider what it is to be self-directed. Knowles believed that the adult is usually not prepared for self-directed learning. Once an adult believes that he/she can take responsibility of his/her own learning, the adult will find learning very rewarding and self-fulfilling.

Discussion and Critique of Lindeman and Knowles' Andragogy

What has been presented is the core of Knowles' andragogical process. In spite of the extensive work and popularity andragogy received because of Knowles, andragogy still received criticism. But at the same time, it also received a greater acceptance than before from adult educators.

Houle, Jarvis, Podeschi, Cole & the Davenports were six educators who questioned andragogy as a theory. Cyril O. Houle (1976) challenged the theoretical status of andragogy and preferred to view education as a simple

fundamental human process rather than one that requires a different understanding for unique age groups. Peter Jarvis (1984) stated that andragogy became popular because of the time (1960) when other romantic curricula were being widely accepted. Jarvis added that andragogy has assumed the status of a theory because it emerged when it did. However, the debate about its validity as an adult learning theory is not yet complete. Podeschi too believed that andragogy became popular because of the time it was introduced. Podeschi stated in his article, "Philosophies, Practices and American Values", that humanistic adult education with emphasis on group processes and self-directed learning was popular in the adult education field because it reflected the American mainstream values.

There were other concerns by adult educators who questioned the andragogical method for the adult learner. Cole (1984) questioned the strong emphasis given to the role of the experience and the amount of criticism given to traditional teaching methods. Cole also stated that other adult educators maintained that andragogy gave to much attention to the immediate, the practical, and the vocational, not giving sufficient attention to the role of the values and ideals of the learning experience. Davenport and Davenport (1985) stated that the adult educator should not assume that all adult learners can be taught by andragogical

techniques. The stated research has proven, based on studies done by reseachers using the Student Orientation Questionaire (Christian, 1983) and the Education Orientation Questionaire (Van Allen, 1982), that andragogical techniques are not always the best method to use when teaching adults. The findings indicated that the learner's preferred learning style, an pedagogical orientation or andragogical orientation, is depended upon the learner's sex, marital status, educational attainment, age and subject taught. Davenport and Davenport believed these findings suggest that adult educators should be trained to use these questionaires in order to find out the orientations of the learners in their classroom. Adult educators should not assume all children are pedagogically oriented and all adults are andragogically oriented. Adult educators should consider a blend of andragogical techniques and pedagogical techniques since few people are primarily pedagogical or andragogical oriented.

Jerry Parsons and Thomas Johnson (1978) asserted that adult educators base their teaching practices on the assumption that adults learn differently than children. This assumption was questioned by the authors. The authors surveyed the literature to see, if in fact, data support this assumption. The authors examined passages from Lindeman and from Knowles' theory to support their hypothesis that adults do not learn

differently than children. The authors (1978) stated that Lindeman makes no reference to the differences between adult and child learning. Lindeman talks about making education a lifelong process and recommends flexible learning programs. Knowles is quoted as saying "...Lindeman did not dichotomize adult versus youth education, but rather adult versus conventional education" (p. 10). The authors concluded that there is no strong evidence to say adults learn differently than children. The data suggested individuals learn differntly and that learning is a gradual and sequential process evolving over the lifespan of an individual.

> . . . Since there are no precise demarcation points in human growth it is logical that the learning process does not change at the time a child becomes and adult. On this basis an adult or child learner should not be considered a separate specie-he is an unique person in constant state of growing, developing and changing. (Parsons, & Johnson, 1978, p. 14)

In 1980 Knowles changed his thinking somewhat about andragogy. At this time, he declared andragogy as a method rather than a theory. He also declared that pedagogy and andragogy are on poles of a continuum rather than a dichotomy and retracted "versus" in his book, The Modern Practice of Adult Education: Andragogy Versus Pedagogy. In spite of this declaration, many adult educators saw andragogy as a sound theoretical framework in which to teach the adult learner.

Helen W. Brown (1981) in her article, "Lateral Thinking

and Andragogy: Improving Problem Solving in Adulthood" recognized the support not given to Knowles' andragogical model as being specifically for adults. She pointed out however that support has been given to the problem solving process that is incorporated within the andragogical model which is believed to be beneficial for the adult learner. Brown believed there are parallels between the process of andragogy and the problem solving models. She pointed out and assumed that the adult attends a learning activity in hopes to solve an immediate problem or any anticipative ones. Because of this reason, a problem solving method would be most useful. In andragogy, the adult learner first identifies his/her needs thus establishing the learning objectives. Secondly, the learner decides how the objectives will be obtained. Brown maintained that the problem solving process can be enhanced if lateral thinking is incorporated. de Bono (1973) defined lateral thinking as creative thinking and conceptualization. It discourages premature closure which often eliminates the individual from thinking some ideas are ridiculous or irrelevant. Lateral thinking encourages changing of ideas. A good lateral thinking strategy is brainstorming.

Robert D. Fox (1981) accepted Knowles' idea of andragogy. Specifically, Fox mirrors Knowles when he too involves the adult learner in the planning process.

In Fox's article, "Learning Involvement in Continuing Professional Education", he asked the question, how may I make planning and management decisions which reflect the needs and values of the learners? This question was asked in order to find ways for the adult learner to be included during the planning stage of the curriculum. The process assured relevancy of courses that interest the adult learner. Fox saw the role of the adult learner in the planning process as:

1. acting as coordinators and accumulators of resources and information;
2. assisting continuing educational staff in assessing needs, establishing learning objectives, designing learning experiences, marketing programs and evaluating outcomes; and,
3. being sources of information for technicians.

Verduin, Miller, and Greer (1977) advocated that the adult learner partake in the planning process. In their book, Adults Teaching Adults, they suggested that the instructional process should begin with three things:

-assessing the entering behavior of the adult learner;

-defining learner and class goals; and,

-defining learning units and procedures.

This process allows the adult learner to know where he/she is in order to determine where he/she needs to go. These steps are gone through with the adult learner

and the facilitator so the learner can set goals based on his/her learning level and experiences. The authors believed that if goals are too difficult to obtain the adult learner will become frustrated, causing him/her to dropout of the program. If the goals are not challenging, the adult learner can feel he/she is wasting his/her time. Verduin, Miller and Greer suggest individual instruction as the best learning experience for each adult to accomplish individual goals. Here, each adult's entering behavior is assessed and goals are set. The adult learner then sets out to accomplish these goals following an individualized curriculum.

Another discussion of the adult learner partaking in the planning process is found in Susan Blair's dissertation, The Development, Implementation, and Evaluation of a Reading Improvement Program for Business and Industry, Dr. Blair conducted a study to determine an effective means of improving job-related reading skills of workers in business and indusrty, operating within the constraints of standard company training programs. Involving the participants in the design of the reading, she found that adult learners understand their needs and interest and want to have a voice in a program of instruction. Blair identifies self-assessment centers as one way in which training programs have the employees participate in program planning. The goal of a self-assessment center is to

identify employees' skill areas which are most in need of development. This process allows the employees to assess their skills which is thought to then allow employees to effectively participate in program planning. However, Beer et al (1984) stated that assessment of employees' skills, feedback from assessment centers and counseling methods usually are not coordinated to maximize the learning of the employees. They concluded that education and training seem to work best when: (a) employees' job experiences have motivated them to learn needed knowledge and /or skill; and, (b) employees are given feedback on their performance by their respective supervisor.

A final point concerning employees' participation in learning programs is offered by Mohrman and Ledford. They (1985) present a wide variety of approaches to increase employees' involvement in training. They argue further that there is a variety of approaches to increase employees involvement in corporations. The most widespread approach are participation groups (quality circles). The purpose or role of this group is to identify performance problems and opportunities within the workplace.

There are many other resources not cited in this section that follow Knowles' andragogical model. In fact, the philosophical base of most resources, which focus on how to teach the adult learner, is andragogy.

Also, one will often find Knowles cited as a reference not Lindeman. The aforementioned article, "Knowles or Lindeman: Would the Real Father of American Andragogy Please Stand Up", by Davenport and Davenport does raise a valid question as to who is really the American father of andragogy. The Davenports insist they are not trying to discredit Knowles for his contributions to the adult education field. However, the authors believe that Knowles was able to popularize andragogy as a legimate method or model in adult education. "He seized upon a catchy term, made it a household word in adult education circles, and brought both andragogy and adult education to the attention of many disciplines..." (Davenport, & Davenport, 1985, p. 4).

Although it could be said that Knowles' andragogical model is not original, Knowles did recapture Lindeman's thoughts on adult education and worked them into a method for teaching adults. Lindeman, on the other hand, was an earlier contributor to adult education. He recognized a distinction between adult education and youth education. Lindeman was able to describe a theoretical framework for adult education in which other theorists/educators could build upon.

B.F.SKinner

Principles of Behaviorism

Skinner is considered to be a behaviorist. The behaviorist sees the learner as an organism acting as a result of a stimuli coming from the external environment. Skinner (1968) believes that psychologists can only concern themselves with observable behavior. What psychologists study can be observed and measured, thereby an effective technology of behavior can be created. This principle is based on Edward Thorndike's "Law of Effect" which states that "...acts followed by a state of affairs which the individual does not avoid and which he often tries to preserve or attain, are selected or fixated" (Skinner, 1968).

Thorndike asserts "Law of Effect" experimenting with cats. Cats are placed in a puzzle box and learn, in order to get their food, a latch is touch that opens the door. Based on this experiment, he believes that the consequences of a behavior determines the probability of its being repeated. When first placed in the box however, the cats explore the insides. If by chance, the latch is hit, reinforcement in the form of food is given which increases the incident of the act until the cats are opening the door immediately after they are placed in the box. The success of operant conditioning

depends upon the learner's efforts being rewarded.

Skinner reformulates Thorndike's principle through his experiment with cats and pigeons and develop the popular concepts "operant conditioning" and later "programmed instruction" and "behavior modification". Like Thorndike, he uses positive reinforcement in form of food to accentuate the desired behavior. This concept swept America in the 1950's and the 1960's and popularized Skinner as the real originator of programmed instruction. It also inspired a tremendous amount of research and development work. Today, Skinner's work continues to have a strong influence on our education system as well as industrial and business' training programs.

Operant conditioning works hand and hand with contingencies of reinforcements. A desired behavior will not happen unless sets of reinforcers are planned, scheduled and used to obtain the desired results. Therefore operant behavior is mainly under the control of the reinforcers. Skinner also believes operant behavior to be an act of will. Although contingencies of reinforcers can be arranged to encourage a desired learning, Skinner maintains that the act is voluntary. There is a cause but it is hard to identify. This puzzlement is due in part to the difficulty in understanding the process of learning. Skinner also believes an individual's natural environment

encourages learning which can happen without teaching except that the learning might come slow or not at all. Therefore, Skinner asserts that a situation must be arranged so that special contingencies of reinforcers will elicit the learning that might otherwise lie dormant.

Operant conditioning has to do with the effects of reward and punishment. It is behavior shaped and maintained by its consequences. Goals, rewards, and incentives are some examples of positive reinforcers; thus, achieving a goal, or obtaining a reward or incentive brings about positive reinforcement. An unpleasant consequence of consideration of reinforcement is the idea of negative reinforcement. Punishment, an example of negative reinforcement, has an affect on our behavior. When punishment follows an act, this often leads to decrease incidences of the act or totally eliminates it. Together positive reinforcement, and negative reinforcement are the two components which bring about the desired learning behavior.

In order for operant conditioning to be successful, Skinner stresses the importance of "shaping" and "contingencies of reinforcement". Shaping involves reinforcing a series of successive approximations of the behavior that are intended to be learned. As the individual progresses toward the desired behavior, each step is reinforced. Contingencies of reinforcement are

the series of reinforcers used to bring about the desired behavior. Thus, to get the same results, an individual responds to stimuli in ways learned in early conditioning. The individual's desired behavior is based on the reinforcers she/he is getting as well as behavior witnessed of another individual in a similar situation. Skinner believes this is likely to bring on the same behavior.

> Frequent reinforcements also builds faith. A person feels sure, or certain, that he will be successful. He enjoys a sense of mastery power, or potency....builds and maintain an interest in what a person is doing. (Skinner, 1968, p. 58)

Wexley (1984) states for over a decade researchers have been studying the effect of schedule reinforcement in the work environment. Wexley mentions the work by Pritchard et al. In Wexley's article, "Personnel Training", he states that Pritchard et al's study improves on other studies that examine schedule of reinforcement in the workplace. It is an improvement from other because it utilizes a partial schedule of reinforcement which has not been studied; but, what often occurs in training.

Today managers in corporations are using Skinner's principle of reinforcement. Wehrenberg (1986) states that the role of managers is to observe and measure behavior, utilizing positive reinforcement. One example illustrates that using positive reinforcement by

managers has increased productivity and enhanced the morale within a department. The recognition of positive reinforcement and the successful use of it is demonstrated by the "exceptional boss". Junkin and O'Meara state in their article, "Thinking About Performance", that the exceptional boss is constantly looking for improvement from his/her employees. He/she is aware of "performance gap", the difference between where the employee is now and where he/she can be. To determine where the employees should be, the exceptional boss analyzes performance through the following four criteria: observable, measurable, result-oriented, and positive. Then, goals are set and objectives are behaviorally stated. To achieve the goals and objectives, "specific" language is used in order to give employees exact information on how they are doing in reference to their performance. The exceptional boss focuses on the positive. He/she looks to reinforce the employee for the good job the employee has done. The exceptional boss does not neglect to use punishment for it does have a place but, punishment does not necessarily bring out the desired behaviors. Punishment more or less redirects behavior.

Skinner's behavioral concept is contingent upon reinforcement. When reinforcement is no longer available, then the behavior can cease completely or decrease until it is not as frequent as it was before

the conditioning takes place. The scheduling of a reinforcement is important. At first, the individual's behavior is shaped for the desired behavior. The subject receives reinforcements every time he/she makes an appropriate response. Skinner describes this as being on a continuous schedule of reinforcement. However, once the individual has formed some of the desired behavior then the reinforcements do not have to occur as often. Skinner found this "fixed-interval" was more effective. He discovered that in spite of the slow responses first recorded to fixed-interval schedule of reinforcement, in time the animal's rate of response is increased.

Programmed Instruction

Programmed instruction makes its first appearance in the laboratory in form of programmed contingencies of reinforcements. It is not Skinner who first introduces this concept, but he is the first to popularize programmed instruction. It is Sydney Pressey (1920) who invents a teaching machine to assist knights in developing their skills at joisting. Pressey develops a series of mechanical devices which presents multiple-choice questions to learners which give them immediate knowledge about the correctness of their choice of answers. He wanted to emphasize immediate

feedback and allow students to proceed at their own pace. Pressey's device is used after instruction. It is a testing device (Pressy) rather than a teaching device (Skinner). Pressey calls it adjunct programming.

The discovery of programmed learning on the part of Skinner came about because of the frustrations he met with conventional methods the American school system uses in teaching, i.e., lecture and large group teaching. In 1954, he delivered an address in Pittsburgh entitled "The Science of Learning and The Art of Teaching". In his address, he stated five limitations of our teaching methods.

1. educational control is mostly aversive;
2. students learn only because of fear of failure, threats, or punishments;
3. the education curriculum provides few skillful or competent programs that move the student from one successful step to the next step in order to achieve the desired learning behavior;
4. teachers are incapable of physically giving the optimal set of contingencies of reinforcement needed by each child due to teacher:student ratio; and,
5. reinforcement is relatively infrequent.

(Hartley, & Davies, 1977)

Skinner believes the solution to these problems is a linear teaching program. This program teaches the

learner a concept(s) by moving him/her one step at a time from a simple to a complex behavior. The learner works at his/her own pace receiving reinforcement for every correct response. He cautions teachers that in a programmed instruction, each step must be carefully designed, put in sequence and made simple so that the learner can accomplish each step and move towards the desired behavior.

Discussion and Critique of Programmed Instruction

There have been objections to Skinner's linear programming which prompt some theorists to criticize its structure and to begin research on its effectiveness as as method. Norman Crowder (1960) assers that the linear programming is boring and monotonous. He is most concerned with linear programming's content is communicated clearly and sucessfully. Because of this matter of interest, Crowder designs a program where the learner is presented with a paragragh and then asked questions about it. With these questions, a number of alternative responses are presented for the learner's selection. The learner is asked to press a button to indicate the response. If the learner is correct, the program tells why and then gives new information. If the responses is incorrect, the program explains why and the learner is directed back to the question. The

program has a remedial version for the learner who makes several errors or who is just not ready for the material.

Similar programmed instructions were developed, some were different in format but seemed based on Skinner's programmed instruction principle. Robert F. Mager (1961) develops an instructional program which gives the students two controls. In one, the student controls the subjects or topics to be learned; and, in the other, the student controls the way the programming is presented (student-generated sequence). The teacher is used as a resource person. Mager calls this "learned-controlled" instruction. Mager primarily works this program in an industrial training setting. He and his colleagues want to prove that student-generated sequences are very different from teacher-generated sequences. Mager finds there is some commonality in the design of the program but most important is his findings that the content of the design is based on what the student needs to learn rather than what the teacher believes needs to be learned.

John H. Cox (1982) in his article, "A New Look At Learner-Controlled Instruction" believes that learner-controlled instruction is one way of incorporating adult learning principles. He states that based on the adult learning principle that adult learners have valuable previous experience and

knowledge, this program allows the adult learner to teach him/herself what he/she needs to know. Base on this aspect of LCI as well as other characteristics of the program , LCI establishes itself as an adult learning methodology. LCI becomes very popular in business training when Marriot Corporation, a leading hospitality industry, (1971) implements LCI to entry-level supervisors in the hotel division. Marriot finds significant reduction in the length of time it takes to train the supervisors. In 1975, Allied Supermarket implements LCI to their assistant managers. They find not only a reduction in training time but also the managers' level of performance has improved. In addition, Allied Supermarket training department reports that LCI demonstrated the ability to train more people in a shoter span of time.

Gordon Pask (1960) is interested in manual skills that can be taught by using programmed instruction. Pask is known for the concept "adaptive instruction" This type of programming allows the material to be either sped up or slowed down according to the ability or pace of the learner. Pask, however, is better known or associated with the study of individual differences between the learner and the field of task analysis, in addition to computer-assisted instruction (1975) where his greatest efforts occur.

Gary Dickinson is an advocate of Skinner. In his

book, Teaching Adults a Handbook For Instructors, Dickinson (1973) states that learning can be more efficient and useful in a formal instructional setting if learning occurs under some direction. In this situation, the instructor controls the external conditions of the learning by organizing the materials and presenting them in such a way that the desired changes can occur.

Programmed instruction had a greater impact on the military than any other educational institution. Because of the enlistees' low aptitude and the technical information that needed to be learned, the slow systematic foresmat of programmed instruction seemed well suited for the enlistees' needs.

Criticisms continued to dominate in the sixties about programmed instruction. Many comparative studies were undertaken between the different types of programmed instruction. Other comparative studies were also done on the effectiveness of programmed instruction in comparison to conventional instruction. A study titled "Use of Programmed Instruction in Teaching Self-Management Skills to Overweight Adults" by Hanson, Borden, Hall, & Hall (1976) is conducted in order to provide some solutions for overweight adults who are not maintaining their weight loss or continue maintance of post-treatment effects. The researchers believe that the problem stems from the way the program is designed.

The program provides the client with direct feedback and encouragement from an expert or a group to follow his/her own individual program or treatment plan. When this phase ends, the client is on his/her own to follow the post-treatment phase without the extrinsic motivation rather, each has to rely on personal intrinsic motivation.

The researchers believe that two solutions are available to solve this problem. The first solution is to provide periodic contact with the client during the post-treatment phase. They refer to this as "booster sessions". The second solution is to reduce the times of direct contact hours with the client. In place of this, the client is provided with more written material. The written material provides the instruction that could otherwise be given orally. Moreover, it is intended for the client to rely more on his/her own resources instead of others when applying self-management techniques. The application of programmed text would require continual interchange between the student and the program. The program would take the student through a slow step-by-step progression. The program would help the student come up with the right answers by using prompts and hints as well as providing immediate feedback.

In order to evaluate the programmed text effectiveness in teaching self-management skills to overweight adults, the following types of programs are

established: (a) conventional self-manangement condition, (b) programmed text with high therapist-group contact, (c) programmed text with low therapist-group contact, (d) attention placebo control condition and (e) no treatment control condition. The researcher conclude that programmed text with high therapist-group contact and low therapist-group contact are effective methods as well as the conventional self-management conditiions. They state there is no significant difference recognize as to the superiority of methods when compared to one another.

In addition to studies conducted on the effectiveness of programmed instruction, Guimei (1977) cites a study carried out by Manning et al in 1968. This study reveal that when comparing the length of time to complete the lecture method to programmed instruction, textbook, a lecture-wookbook, programmed instruction and the textbook took less time to complete than the lecture method.

Regardless of the many studies performed during this time there were still several questions raised about programmed instruction by other behaviorists and educators. Some of these questions were:

1. When might a careful linear exposition in short steps be most appropriate?
2. When is it appropriate to ask a multiple-choice question?

3. Do we need the student to make a response to every frame?
4. Do we always have to provide a correct answer?
5. Can this point best be made with an appropriate illustration?
6. Is it more appropriate to use lenghty prose passages with adjunct questions at certain times?
7. Would it be best for the learner to work in groups on this topic?
8. Is it better for the learner to control his own sequence of questions?

These questions have a major impact on the changes in the design of programmed instruction. Instructional programs are now incorporating other methods, i.e., media, and coming up with programmed instructional packages rather than a single program textbook.

Ross and Wasicsko (1981) construct a handbook titled "Modules For Adaptive Instruction: A Handbook For College and University Teachers" for university teachers at Fried-Hardeman College. The handbook is intended to provide three effective methods of instruction that they believe insure individual instruction. The following types of programmed instructions are identified as three effective methods:

1. personalized system of instruction,
2. computer-management instruction and
3. computer-assisted instruction.

The authors' purpose is to provide teachers with options, besides the conventional method, that they can choose for classroom instruction and, to show how appropriate these options are for the classes they are teaching. In this regard, the authors refer to the concept of "adaptive instruction". They define it as the following:

> specifically adaptive means tailoring or selecting or prescribing educational experiences in accord with the unique characteristics of the learner. It means asking and answering such questions as: what motivates or interests the learner?, what are their aptitudes?, what learning procedures or methods will they react most positively to? and what mode or style of learning do they use the most. (p. 5)

When instructions are "adaptive", the learner learns at his/her own pace and completes a learning activity without fully depending on the instructor. The authors classify personalized system of instruction, computer-management instruction and computer-assisted instruction as "adaptive instruction" methods. The authors are not proclaiming that programmed instuction is the best but programmed instruction is an option that may be more appropriate and, at the same time, tailors to the learner's need. Ross and Wasicsko maintain that a method that works in one situation may not be employed in another.

With the development of microcomputers, educational technology has brought learning to adult

learners/employees at their convenience. Training programs within corporations have recognized computer-assisted instruction as a valuble option. George W. Matthews (1984) in his article, "Teaching With Computers" describes how General Telephone Co. in Tampa, Florida implements computers in their learning center. Matthews states that a learning center is developed to assist 11,000 employees. At this center, computer-assisted instruction is utilized with the intent to work at the pace of the employee not the trainer. The program is designed to constantly monitor the learner's progress until he/she comes to know the material. The program gives immediate feedback and sometimes there is an occasional congratulatory message. A student who feels he/she needs more practice in a certain area can easily obtain the appropriate diskette. In time, the computer-assisted instruction program is evaluated by the programmers. Employees are asked to record their answers on a sheet. This gives the programmers an idea how questions are responded to and how long it takes for employees to go from one question to the next. Employees are also observed by the programmers in order to see their behaviors at the terminals. The evaluation concludes with the employees giving their personal reactions and evaluation of the program.

Stahl et al (1987) describe how interactive video, a

computer-based training, is another option that can be utilized in training. The interactive video operates when the programming is presented, the employee interacts with the program and the results are recorded through a combination of videodisc, video-tape and computer disc. The authors state that the system teaches, quizzes and keeps track of the employee's progress as he/she moves along through the program. This system, they believe, satisfys the self-directed learner. Stahl et al (1987) cite Jack-In-The-Box-Fast-Food Restaurant and GTE as two corporations using interactive videodisc. This system is chosen by Jack-In-The-Box in order to cut down on training time for its managers. The trainers were looking to reduce the number of questions being asked by the employees and reduce the number of answers given by the trainers. GTE implements the interactive videodisc because the trainers believe it forces employees to practice the learning material, it allows quick access to information and the employees must demonstrate competencies in order to move to the next level.

The research cited in this section does not lead one to say that programmed instruction was more effective than other conventional methods. What method(s) is more effective depends upon the objectives of the lesson, the content of the material, the complexity of the skill to be learned and most importantly, the learning style of

the learner. However, research has shown that programmed instruction was as effective as any other method. Where comparisons have been made between programmed instruction and other classroom instructions, all methods were proven effective. Although computer-based training (computer-assisted instruction) has been proven effective for the the adult learner/employee, some trainers still believe it is machine driven and manufacturer controlled. Galagan (1987) states that computer learning programs determines the style and structure of learning, making the learner and trainer adapt to its process. This concludes Skinner's principle on programmed instruction. The paper will now introduced Skinner's concept on behavior modification.

Behavior Modification

Behavior modification is used in schools, especially for therapeutic procedures, and with industries. The concept of behavior modification is based on Skinner's principle of operant conditioning. The idea is shaping human behavior for therapeutic purposes. This method is commonly used with the mentally retarded in order to teach basic skills and produce desirable behavior. A reward system (tangible items) is found to enhance behavior modification. It lets the learner know he/she

is obtaining the goal. Research shows that the token system can be successful with retarded and autistic people, delinquent psychiatric in-patients, children in the classroom, children at home as well as trainees on the job. However, the success of behavior modification is when the learner is able to wean from the tangible item and is able to reach the desired behavior from intrinsic motivation. Irving Jorge (1965) states that when using behavior modification the success of it is contingent upon the adult educator knowing the task to be learned well and knowing the adult learner well so that success can be gained. Failure for the adult learner often times leads to frustration and a negative self concept. It also reaffirms the learner's inabilities that so often haunts him/her about the potential to learn. Changing the learner's attitude about him/herself and about learning is a major obstacle that the educator must address. Therefore, the educator must plan the learning so that the learner gets a sense of mastery and success.

Discussion and Critique of Behavior Modification

The concept of behavior modification is also used in the business and industry setting. Kraut (1979) states there are models develop by theorists that are utilized by trainers in business and industry that reflect

Skinner's concept of behavior modification. Yet, these models have a different approach to behavioral change. One model in particular, behavior modeling, (a) shows the trainee what to do, (b) allows the trainee to practice the expected behavior(s), (c) give feedback on trainee's performances and (d) engages trainee in a systematic training program. Kraut adds that this approach utilizes instructional media such as videotape and film.

Skinner's concept of behavior modification is widely accepted by both educational and business institutions. To determine its effectiveness with adult learners/employees, the training literature has little documention. However, Wexley (1984) states that a comprehensive review of the training literature from 1963 - 1976 concludes that there is no evidence from reported research of the effectiveness of behavior modification in industrial training. Wexley did mention two studies (1979, 1981), that demonstrate how behavior modification has been used successfully to increase safety performance.

The discussion presented above was an explanation of Skinner's principle on "operant conditioning", "programmed instruction" and "behavior modification". These principles can be very effective but much is dependent upon the objectives of the activity and the characteristics of the learner. The decision to use

Skinner's principle often depends on the educator's time to gather materials, to learn the lesson well, to set up the contingencies of reinforcement, and then to program the lesson. With that thought in mind, there are many implications for the adult learner and for the trainer that need to be addressed.

Implications

The adult learner will find that the general principles of behaviorism are present in most skill training programs. These programs are broken into segments or learning tasks where a correct response is rewarded. Especially in business, it is found that these programs are usually delivered via computer instruction. Because of the high investment in computer instruction, the adult learner will find him/herself in front of a highly sophisticated teaching machine, based on Skinner's programmed instruction principle, learning a task on his/her own. As a result, the adult learner will find it necessary to network with other adult learners who can serve as "resource teachers". This will require the adult learner to take on a new role. It is likely the learner will be considered a equal partner in the learning experience, teaching/assisting other adult learners when necessary. He/she will not only answer his/her own questions but

will be relied upon to answer others. Because the adult learner had little training in learning on his/her own, teaching other adults and until recently it has been the case that working on computers was limited, the learner will find that he/she needs to be well motivated, disciplined and resourceful. The adult learner might find this difficult at first but they will find it necessary to insist that training be given on how to use computer for instruction, how to be a self teacher, how to assist other adult learners and how to be supportive to each other. The adult learner must recognize that programmed instruction does not provide the tools for problem solving. Therefore, the adult would need to seek out classes or workshops that catered to problem solving methods and group discussions that are more appropriate for solving daily life needs. As there are implications for the adult learner there are also implications for the trainer.

The trainer will find that when applying the principle of behaviorism there are many implications. The trainer will find there are some limitations of programmed instruction. Used effectively for teaching technical skills, the trainer will find programmed instruction is not as effective in teaching problem solving skills. There will be a need to incorporate other methods that focus on problem solving training. This would be the case when training recruiters. When

designing a curriculum based on the principles of behaviorism, the corporate trainer must keep in mind the necessary skills and competencies a recruiter needs in order to adequately do his/her job. The trainer must examine the method and determine whether the goals and objectives set to train recruiters can best be met through this type of instruction. The following methodological implications should also be considered when designing training for recruiters, who are adult learners:

1. the adult educator must know the learning styles of his/her learner to determine whether programmed instruction is appropriate;
2. the adult educator must know whether the learning activity can best be delivered by programmed instruction or with another method;
3. the adult educator must know the subject matter well;
4. the objectives must be clearly stated in specific and measurable terms;
5. the content must be broken into simple steps which are easy to master. These steps must be designed to encourage self-instruction and an overt response by the learner;
6. the content must allow for immediate feedback so that the learner knows whether his/her response is correct; and,

7. the program must be design to ensure that learning will occur from the program itself.

Programmed instruction allows the trainer more interaction with the students, providing more individual attention. It also allows the trainer to concentrate on teaching more complex skills permitting the program to teach factual ones. In order for programmed instruction to be successful, the trainer must orient the student to the program. This provides instruction on how to use a teaching machine and how to work on his/her own. Programmed instruction has many advantages but the trainer must keep in mind that it can take the learner a long time to complete and the trainer a long time to develop. Not only will the learner need an orientation but the trainer as well in how to develop a program. This will cost money and time. Additionally, as computer-assisted instruction are widely being utilized in the training setting, the trainer must assess whether the design of programs are sensitve to learner's individual differences. One most note as well, as technology becomes more interactive, it is important to continue to explore how to use learn control systems productively.

Allen Tough

Self-directed Learning

Allen Tough's work is based on the humanistic approach as typified by Carl Rogers. The humanist believes that there is a natural tendency for people to learn and that learning will come if stimulated by the environment. What this implies is that (a) a variety of resources are available; and, (b) assistance is provided in selecting experience relevant to the learning activity. This means the facilitator facilitates the learning experience so that learning will be a natural process without the imposing on the direction and the way the learning process is conducted. Tough based his philosophy on this idea. He was influenced by the works of Carl Rogers and Cyril O. Houle. Carl Rogers played an important role in the emergence of self-directed learning. In this book, Freedom to Learn, Roger focused on the role of the facilitator in self-directed learning. He believed that what is important in teaching is developing self-directed learners who can take the responsibility for their own learning, not using self-directed learning as a technique or teaching methodology. Similarly, Roger (1982) stated that self-directed learning required the facilitator to be understanding of the needs of the learners, accepting

for their own learning; and, building a relationship between the facilitator and the students to develop student-directed learners.

Houle's philosophy on self-teaching was another influential factor for Tough. Houle's book, The Inquirying Mind, studied twenty-two self taught learners. Roger and Houle influenced Tough to examine the adult learner, specifically, what major efforts the learner has employed in order to change him/herself. Tough wanted to pinpoint only the highly deliberate learning efforts pursued by the learner, not the large number of unconscious events and forces that produced change. Nonetheless, Tough made it clear that he aimed to look at all of the adult learning projects, regardless of what, when, where, why, and how the learner was trying to learn. He (1971) stated three major reasons for analyzing why the adult learner engaged in very deliberate learning efforts. The three reasons were as follows:

1. very deliberate learning efforts accounted for a large portion of the learner's total change over a year;
2. the concept of self-directed learning had been insufficiently studied, and,
3. adults' highly deliberate efforts to learn provided an excellent starting point for developing better competence and help in adult

learning.

Tough analyzed all learning efforts in which the learner did most of the day-to-day planning. He stated that while some learning projects were relatively brief and superficial, many projects provided the adult learner with a deeper understanding of the world and of the learner.

The ramifications of the processes involved in adult learning have, according to Tough, far reaching effects. He (1971) pointed out that several writers have claimed that adult learning/education is a crucial factor in achieving peace, reducing poverty and discrimination, increasing the effectiveness of the consumer's decision, reducing pollution and population growth.

> . . . individual as well as society benefits from his successful attempts to learn. He gains new abilities and competence, new strengh and confidence, an enlarged understanding of the people and environment around him. He can cope better with changes in job, technology values and consumer products. (p. 4)

In his book, The Adult's Learning Project: A Fresh New Approach to Theory and Practice in Adult Learning, Tough (1971) used "episodes" instead of learning projects. He stated that the concept of an episode was the foundation in which the definition of a learning project was built. Tough defined episode as "a person or time devoted to a cluster or sequence of similar or related activities which are not interrupted much by

other activities" (p. 6). An episode has a beginning and ending time. The activities during an episode includes all the person's experiences during that period. The term episode came into use in 1966 when Tough interviewed adults in an open-ended question format. He explained that when the adults talked about their learning projects, they structured their description in the form of episodes. From that, it became clear to Tough that many adults planned or described their day in terms of episodes.

In each episode, the main goal was to gain and retain specific knowledge and skill. Tough (1971) defined knowledge and skill because they were broad concepts. Knowledge or skill by his definition:

> . . . includes any positive or desired changes or improvement in a person's knowledge, understanding, awareness, comprehension, beliefs, ability to apply . . . and/or some other personality characteristic, inner behavior, or overt behavior. These changes occur from experience, what a person sees, hears, feels, thinks or does. (p. 8)

Tough stated there were two criteria for a learning episode. They are: (a) the objectives of the learning episode is to gain specific knowledge and skill; and, (b) the learner has acquired a specific knowledge and skill. Tough determined whether a learning venture was a very deliberate learning episode by the motivating factors. He stated that if the intention of an episode was to gain and/or retain knowledge and skill, it is

considered a very deliberate episode. Tough concluded that he was interested in episodes where the main purpose accounted for more than half of the learner's motivation. These learning efforts should provide a great deal of knowledge, skill, understanding, affective change, and behavioral change in the learner.

Tough's definition of "learning project" is similar to episode. He defined learning project as "simply a major, highly deliberate effort to gain certain knowledge and skill (or to change in some other way)" (Tough, 1971, p. 1). Some learning projects are attempts to improve one's skill or performance, or to change one's attitude or emotional reactions. Others involve efforts to change one's overt behavior or to break a habit. As one can see, both learning project and episode are one in the same but, as Tough claims, episode is the terminology with which the adult learner identifies. In a 1966 article, "Assistance Obtained By Adult Self-Teacher", Tough defined the following three concepts:

1. self-teaching - learning during which the adult clearly acts as his own teacher.
2. self-teacher - any person engaged in self-teaching.
3. self-teachers - autonomous learners, self-propelled learners and autodidactics.

Tough placed these three concepts under the umbrella of

self-directed learning. Also in this article, Tough provided information gathered from a survey conducted during this time. His concerns were:

1. the difficulties that had arisen during self-teaching;
2. the assistance that self-teachers obtained with various aspects or tasks of self-teaching;
3. how many individuals provided the assistance;
4. what types of people were the assistants; and,
5. how much additional assistance do self-teacher wants.

Based on a two hour interview with forty college graduates, Tough discovered that each interviewee was involved in at least one eighty hour learning project a year. In addition to this, Tough stated that the primary responsibility for planning the strategy, motivating the learner and making sure that everything necessary for success rested upon the learner. However, Tough stated that the learner did obtain some assistance from colleagues, family and friends. He also noted that the interviewee expressed three concerns:

1. how to establish goals;
2. what activities are suitable in obtaining the learner's goal; and,
3. what subject matter is best sought through self-directed learning.

In 1970, a similar study was conducted with children

ten and sixteen years of age. Tough was looking at the learning activities these two age groups engaged in outside of the classroom. Based on the findings, he concluded that both groups engaged in numerous extra-curricular activities with their learning pattern similar to adults. On the other hand, Tough noted several differences between the learning efforts of a ten year old and that of an adult. He mentioned three differences:

1. The ten year old learned a greater variety of knowledge and skills. The adult seeks to learn when there is an interests.
2. The ten year old's learning project was relatively short. The project may last about an hour. The ten year old may have questions about the learning but then it was over. With the adult learner, each project lasted at least eighty hours.
3. The intent to learn by the ten year old was based on fun. It was not a conscious decision by the him/her to build knowledge or skill even though a great deal of it was built. With the adult learner, a conscious decision is made with the intent to gain knowledge and skill as well as modify behavior.

Tough found the sixteen year old similar to the adult. The sixteen year old involved him/herself in a

learning project with the intent to learn. These projects are usually learning activities that help deal with the new responsibilities and problems of this age. Tough also found some differences. The sixteen year old conducted more learning projects than adults and on the average spent only seventy hours on a learning project.

In 1971, still investigating why adults engaged in very deliberate learning efforts, Tough ventured upon another research study. Here, the concept "deliberate learning efforts" was used instead of learning project or episode. Tough collected data from two cities in Canada using seven different populations. The subjects were blue-collar factory workers, women and men in jobs at the lower end of the white-collar scale, beginning elementary school teachers, municipal politicians, social science professors, and upper-middle class women with preschool children. Based on the five hundred thirty-eight surveyed, the study revealed that eighty-four percent of these learners planned their own learning while sixteen percent are planned by someone else or by a group.

In 1979, Tough wrote an article titled, "Fostering Self-Planned Learning", wherein he reported additional information about the adult engaging in very deliberate learning efforts. Here, Tough, reported the following:

1. Two-thirds of all major learning activites were planned and carried through by the adult learner.

2. Twelve percent were planned through groups or an institution.
3. Eight percent were planned with an individual.
4. Three percent are planned through programmed instruction, lab, television or etc.

Tough learned that for the adults studied, five hundred to six hundred hours were spent on each learning project. Some adults spent less than one hundred hours but most adults spent more than two thousand hours in a self planned episode in which the motivating factor was to learn a skill or modify a behavior. Tough states that in any given year almost all adults do at least one or two major self-planned learning efforts. Some adults do as many as fifteen to twenty. The average adult does at least five or six major self-planned learning efforts each year which involve five to six distinct areas of knowledge and skill. In rank order, Tough found adult learners were motivated by the following factors:

1. to solve an immediate problem;
2. to apply knowledge or skill to their jobs, homes or families;
3. to master a subject for a degree; and
4. to satisfy a curiosity

Tough concludes that adults chose self-planned learning projects for the sesequent reasons:

1. to select subject matters that will fit the adult's need and interest instead of a large

body of knowledge that is not applicable;

2. to select a location convenient for the adult learner;
3. to allow for flexibility;
4. to address their own financial situation; and,
5. to enjoy the independence self-planned learning gives you.

Tough (1979) stated that these findings were different from (1971) data and attributed this to following three reasons:

1. The surveyers were thoroughly familiar with the purpose of the survey and the definition of self-planned learning efforts.
2. The definition of self-planned learning efforts was somewhat different than the definition in 1971.
3. The learners, who were actually involved in the self-planned learning effort, were interviewed.

He also stated that this survey had been conducted around the country as well as outside the United States. Tough found both men and women coming from various backgrounds and settings had been involved in self-planned learning activities.

Tough believes adult educators do not take into consideration the findings of these various studies. Adult educators plan by a subject's curriculum but the adult learner already has in mind what he/she wants to

learn. As a result, the adult educator's established curriculum may not speak to the learning needs of the adult learner thereby stifling the motivation of the learner. An effective prevention for the loss of motivation, Tough recommends asking the adult learner what they want to know and how does he/she want to approach the learning activity.

In 1977, a dialogue on independent, self-directed learning was presented at George Washington University with Ron Gross, Tom Herbert and Allen Tough. The transcript is titled "Independent, Self-Directed Learners in American Life: The Other 80 Percent of Learning". Tough reviewed his 1971 studies in which several foreign countries's from West Africa, Australia, New Zealand and Jamaica were surveyed. The focus of the study centered on how many self-planned learning projects the adult engaged in. Tough stated that the findings were surprising because the results indicated the same data for all groups. Tough declared the same patterns existed no matter the country. There were, of course, some subtle differences. Tough came to the conclusion that educational institutions only saw twenty percent of adult learning involvement. The other eighty percent of adult learning occurred outside educational institutions. Tough challenged the audience by asking specific questions that addressed the other eighty percent of self-directed adult learners:

1. What can adult educators do about this?
2. How can adult educators change the institution?
3. How can policies and funding address the other eighty percent?
5. How can adult educators facilitate and foster this wide range of adult learning?

Discussion and Critique of Self-directed Learning

Tough's research has inspired many adult educators to critically analyze the adult education field, the concept of self-directed learning, the education of self-directed adult learners and examine ways in which our educational institutions can encourage autonomous and self-actualized adult learners. However, he has received his share of criticism. Major among his critics were Pedler, Brookfield, and Keller.

Mike Pedler (1972) criticized the population sampled during Tough's 1970 survey. He additionally was concern with the prompting used to elicit information. Pedler stated regardless of the two flaws, he believed that the findings and the implications from Tough research should be widely used across the world. Brookfield (1981) too criticized the population sampled in the 1970 survey. He stated that the samplers who undertook a self-planned learning activity were learners who had a high educational attainment which one would expect a certain

amount of self-directedness and success. He also commented upon the probing and prompting the interviewers used to get the interviewees to think about all the self-planned learning activities they had engaged in during that specific year. Brookfield gave Tough credit for the consistent application of a carefully developed concept. He stated Tough had shown that institutionalized adult education classes were only the tip of the adult learning iceberg.

Stephen Brookfield (1984) questioned the usage of the word "learning" in self-directed learning. He maintained that this concept entailed the learner to set up his/her own external conditions necessary to produce internal change. Brookfied stated that "education" did the same thing, it was a process that provided external conditions which facilitated internal change. He believed self-directed learning would have been more suitably termed "self-education". Using self-education, eliminated "semantic confusion" which some adult educators believed the term self-directed learning does. (Boshier, 1983; & Brookfield, 1984) Brookfield believed that unclear usage of terms could have a profound conceptual implication on our understanding of learning and education. He (1984) stated:

> . . . it is important that we remember this semantic distinction when we consider research in this area and one priority for thinkers in this field must be to propose clear and unambiguous definitions of learning and education in order that internal mental change is distinguished from the external

collection, management and analysis of information. (p. 61)

In the late sixties, Tough preferred to use the term "self-teaching" but the word learning came to use. Additionally, Brookfield (1984) stated in his article titled, "Self-directed Adult Learning: A Critical Paradigm", that self-directed learning had established itself in the education arena. Nevertheless, he wanted to extend further analysis on the concept of self-directed learning and undertake an in-depth analysis to verify its effectiveness as another technique of learning. He discussed nine criticisms regarding the current state of self-directed learning research:

1. the emphasis on middle class adults as the sampling population for this type of learning;
2. the use of quantitative or quasi-quantitative measuring in assessing the extent of learning;
3. the emphasis on the individual dimensions of such learning to the exclusion of any consideration to the social context in which the learning occurred;
4. the absence of any extended discussion of the implications of these studies for questions of social and political issues;
5. the use of research instruments not applicable to various adult groups;

6. the use of bombarding prompt questions;
7. the reliance upon adult's memory of the actual number of hours spent on a learning project and who provided assistance;
8. the use of an instrument that can objectively measure how effective was the learning; and,
9. the means to measure the amount of aesthetic awareness and political consciousness learned by the learner.

Stephen Keeler (1982) maintained that although self-directed learning had been accepted in the educational arena, existing teacher-training programs were merely giving it "lip-service". Keeler stated that teacher-training programs were introducing the theory and the philosophy of self-directed learning but very little opportunity was given for trainees to apply it to the educational field. He believed the teachers themselves were reluctant to accept and explore the idea of self-directed learning. He stated some teachers accepted the idea but just accepting it denied the trainees its fundamental principle.

Paul V. Decker (1979) stated in his article, "Adult Education 1980 and Beyond: Implications for Research and Development", that Tough's reference to the eighty percent adult learning iceberg could be equated to Ivan Illich's concept of "de-schooled". Decker therefore believed it was necessary to investigate the following

questions:

1. What were essential qualities of the independent adult learner?
2. Was a certain kind of degree of self awareness required for independent learning?
3. What attitudes, skills and behavior were required for effective independent learning?
4. How were these best acquired and when?

Decker stated the answers to these questions were crucial so that educators could begin to train the self-directed adult learner the qualities necessary for success. Even though Tough received his share of criticism, he had many supporters. Tough inspired other adult educators to experiment with self-directed learning with individual learners or within a group.

In 1977, a self-directed learning readiness scale had been developed by Guglielmino to assess whether a learner had the capability of being a self-directed learner. This assessment scale is a fifty-eight item Likert scale designed to assess the extent to which individuals believe themselves to possess skills and attitudes associated with self-direction in learning.

In Toward Student Responsibility For Learning, John Heron wrote a chapter titled, "Assessment Revisited". He (1981) posed the question, where did self-directed learning and inquiry start? Heron believed the originators became self-directed through a

threefold act of assessment:

1. The originators assessed and continued to assess themselves as well as with each other to deterimine whether they had mastered the subject they were interested in through self-directed inquiry.
2. They assessed themselves to see if in fact they were competent to assess others.
3. They assessed each other as relatively incompetent to be evaluators to self and peers as self-directed learners.

Heron concluded self-assessment was essential in self-directed learning. He defined the self-directed learner as:

> . . . a person who is self-determining-who can set his own learning objective, devise a rational programme to attain them, set criteria of excellence by which to assess the work he produces, and assess his own work in the light of those criteria. (p. 64)

Patrick Penland (1978) conducted research similar to Tough. His research was done in the United States. His findings reported eighty percent of adults are involved in a learning project each year and three-quarters of them are self-directed. He noted that the self-directed learners received assistance from others as well as from non-human resources which is different from Tough's findings.

Tough's concept of self-directed learning was not

only popular in the educational arena; it was also employed in business and industry. Raneck, Brecker, Herman and Knowles decribe how each used self-directed learning in a business setting. William Raneck, a training coordinator of the Commonwealth of Massachusetts, Boston, (1971) reported on a participative learning experience for supervisory training. In his article, "Delegate Learning Responsibilities To The Trainees", Raneck described a three credit course in personnel administration for forty-five first-line and staff supervisors in a large automobile manufacturing company. A textbook was used as the teaching source. Employees taught each other the information in the book and select one aspect of it for research. Employees were encourage to use other agencies as resource person for questions. The trainer was available for questions but employees were charged $100 dollars for consulting fee. This was done to encourge them to use outside resources. At the end of the semester, this method was evaluated. The employees learned they could learn a course without an instructor. They further state that a trainer/instructor is not God in the classroom or anywhere else.

Charles Brecker (1972) in his article, "Upgrading Blue Collar and Service Workers", describes three ways in which the employee can be upgraded. He stated the employee usually did this through (a) promotion, (b)

training by the employer and (c) self-instruction. Brecker believed that upgrading through self-instruction was perhaps the most important of all upgrading routes. He stated that an employee through his/her own initiative will acquire the skill and/or knowledge necessary to upgrade their position and income because he/she is invested. Self-instruction fulfills a practical goal.

Reg Herman (1983) implemented the concept of self-directed learning to "language of group skills" (Logs). Herman's article titled, "Intervening in Groups: A Repertoire and Language of Group Skills for Self-directed Learning in Decision-Making groups" examined a self-directed learning strategy for the identification, definition and development of a core of competencies identify as a common language to facilitate collaborative group problem solving and decision making (logs). Herman believed this strategy would be adaptable to a wide range of groups that were sufficiently self-directed to create from Logs' base their own skill building language workbook. The purpose of the program was to encourage a collaborative search by the facilitator in identifying and defining a core of cooperative group skills. The second purpose was to have the facilitator move gradually from initial control of the content and the process to a position where he/she relinguished learning responsibilities to the

group thereby the participants becoming self-directed learners. From that point on, the facilitator took on a newly defined role as observer/consultant.

Malcolm S. Knowles (1984), another advocate for self-directed learning, applied Tough's concept of self-directed learning to business. "Self-directed Learning on The Job at Lloyds Bank of California," a chapter in his book, Andragogy in Action, Knowles described how a learning contract could be a used as a technique for employing self-directed learning. Knowles (1987) defines a learning contract as "a plan for acquiring specified knowledge, understanding, skillls, attitudes, or values by a learner" (p. 62). At Lloyds Bank, a learning contract was established for a consumer finance officer. First, the employee's job performance was reviewed by the branch manager. The areas of improvement were stated. From this, the employee and the branch manager established goals to improve the deficit areas. The employee then planned a course of action through the consultation of an education officer. From that point, the employee presented a total package to his/her branch manager and periodic meeting were set up to evaluate employee's progress.

Knowles believed this was a means in which self-directed learning could be implemented at a business. By establishing a learning contract and the focal point of self-directed learning, the learning

contract provided means of blending job requirements and corporate goals with the employee's personal goals and objectives together. The contract also gave clear understanding of the responsibilities of the branch manager, the educational officer and the employee. Knowles stated the important aspect of the learning contract was the employee's self-direction. He believed the employee benefitted from the learning contract because he/she had input on how the learning took place and how the learning was evaluated. Knowles stated one disadvantage for adopting a learning contract in a corporation. Learning contracts are unsuccessful if the learner has no experience with this kind of learning. Learners seldom have the opportunity to learn on their own. Therefore, Knowles suggested an orientation of some kind that will provide skill building in the construction of learning contracts if they are to be successful.

Not only are adult learners form education and business institutions benefitting from self-directed learning, the hard-to-reach adult is also taking advantage of this method of learning. Ralph Brockett (1983) spoke on applying self-directed learning to the "hard-to-reach" adult. In his article, "Self-directed Learning and The Hard-To-Reach Adult", Brockett believed self-directed learning was an excellent strategy for better understanding and ultimately better servicing the

hard-to-reach adult. He defined hard-to-reach adult based on D.G. Darkenwald (1980) definition,

> . . . as the adult population who tends to be underserved by continuing education programs. Specifically, hard-to-reach adults include individuals of low socioeconomical status, persons in their later years, and individuals who, because of physical handicap or geographical location, are isolated from educational opportunities. (p. 16)

Numerous studies have been conducted on the hard-to-reach adult's efforts to undertake a self-planned learning project. These studies illustrated that learning was taking place among older, isolated adults of low socioeconomic status. The studies also have shown that many of these adults however were faced with many obstacles in their efforts to pursue a learning project.

Tough's studies on the self-directed adult learner have been researched and implemented in many ways. The notion that eighty percent of adult learners were being educated through self-directed learning had inspired many adult educators to explore the possibility of its uses as a working theory for the adult learner. Based on research data and successful use in various applications, self-directed learning has been incorporated in business and education training disguised under such terms as learning contracts, independent study and other terminology that pertain to specific discipline. Tough's studies have influenced

reseachers to study other areas. One of the areas in which the influence is best witnessed addresses the reasons for adult participation in a learning activity. Research by Cross, 1978; Anderson and Darkenwald, 1979; & Brickell, 1979 have contributed to an understanding on this subject.

Implications

Instituting the concept of self-directed learning has many advantages for the adult learner. With current skills becoming obsolete because of technological advancement, the adult learner will find him/herself needing new skills. The adult learner can now "brush up" his/her skills by participating in learning activites without the constraint of traditional classroom learning. The classroom has often been looked upon as a threat by many adults for various reasons. Perhaps enticing the adult learner to participate in learning through self-directed approach will eliminate some of the inhibiting factors already documented i.e.,the stress of peer competition, trying to live up to someone else's expectation and the past experience of unpleasant learning activities. With self-directed learning, the adult learner is not forced to take a set of unnecessary courses nor required to learn an entire curriculum. Self-directed learning allows the adult to

learn a subject matter or topic that will satisfy his/her particular need and learn the way the adult learner prefers according to his/her dominant learning styles.

Recognizing that eighty percent of the adult population are being educated through self-directed means and are very successful in doing so, according to Tough's two criteria for a learning episode, these adults are needed to teach other adults as well as adult educators the strategy they have employed that have made them successful self-directed learners. These adults can discuss their successful and unsuccessful projects by highlighting important details of each.

Adults must realize the power of self-directed learning. It provides an avenue for self-education that has the potential to address the need for adults to become self-actualized. Self-directed learning gives adult learners the opportunity to become knowledgeable of the rapidly changing world in which they live. Knowledge brings a certain amount of empowerment and self-fulfillment. Self-directed learning is a way in which the adult learner can obtain knowledge, feel empowered and become self-fulfilled.

Self-directed learning appears to be a method that is successful in educating a large number of adults. Trainers, whose responsibility to train adults, should consider the implications of self-directed learning.

Trainers should acquaint themselves to the studies on self-directed learning that have been conducted by Tough and other adult educators/researchers. Trainers need to look at the implication of these studies as well as the recommendations they provide. Trainers should also examine the feasibility of such method as a part of their training curriculum.

Implementing self-directed learning, could possibly be a marketing strategy to attract adult learners to your training program, allowing many adults learners to participate in the training program, but at the same time, providing flexibility to attend to the other various responsibilities they might have. Because of this reason, self-directed learning could be one way in which the recruiters receive training. Recruiters' major responsibility is to recruit on college campuses. This requires the recruiters to be away from the company a good percentage of time as well as away from corporate training. Self-directed learning could be a very valuable method for recruiters to implement an individualize curriculum. Self-directed learning could be employed by (a) using the resources on college campuses; (b) exchanging information with other recruiters; (c) learning the functions of the career placement offices that they visit; and, (d) observing and critiquing interviews conducted by recruiters. Incorporating self-directed learning for recruiters is

one way of assuring that recruiters receive the training he/she needs. Recruiters, together with the trainer, can develop a plan that will satisfy the learning need of the recruiter. It is satisfying ones learning need that is of interest to the adult learner.

As it is the case with recruiters, it is also the case with other employees that economically self-directed learning allows a larger number of adults to participate in the training program. Many adult learners can subscribe to the one course or many courses they believe will acomplish their goals withot feeling obligated in subscribing to the entire curriculum. In order for self-directed learning to be successful, trainers must orient themsleves to the philosphy of this concept as well as provide an orientation to the adult learner. This is necessary in order for the learner to know the procedures and characteristics required for successful self inquiry. Trainers should also familiarize themselves with self-directed readiness scales. These scales should be given to assess whether learners are in fact self-directed. If not, procedures can be taken to prepare them for a self-directed learning regimen.

Implementing self-directed learning, requires the trainer to take on a different role in the classroom. The trainer is no longer the sole disseminator of knowledge. It is a role that requires you to be a

"consultant" and "partner". Initially, this role requires the trainer to provide leadership until the learner is comfortable in what the goals are and how to go about the learning task. The trainer must also be resourceful, patient, competent in his/her field and committed to the preparation time for self-directed learning. The trainer must also be cognizant of the negative attitudes that adults bring to the classroom. The trainer must recognize these attitudes and convince the adult learners that learning is possible again and that they can be responsible for their own learning.

Experientialist-as typified by David Kolb

Experiential Learning

David Kolb's experiential learning model was based on Carl Jung's concept of personality traits. His learning model emphasized the critical role experience plays in the learning process. It is this emphasis that differentiated Kolb's learning theory from other cognitive learning theories.

David Kolb gave two reasons why he termed his theory experiential learning. The first reason was due to the influence Dewey, Lewin, and Piaget's theories had on his thinking. The second reason was the crucial role experience plays in the learning process he theorized. Kolb viewed his theory as "holistic." He believed his

theory was offering a holistic integrative perspective on learning that combined experience, perception, cognition and behavior together. He differentiated experiental learning theory from the behaviorist learning theory. Kolb stated experiential learning puts emphasis on the process of learning not on the outcome. Kolb (1984) referred to the behaviorist theory as acquiring knowledge through an impersonal, totally logical process based on a detached and objective observation. Experiential learning is a process whereby concepts are derived and continuously changing because of experiences. Ideas are formed and reformed through experiences. Kolb's belief that experience was an important part of learning was shared by many; John Dewey, Kurt Lewin, Chris Argyis, Donald Schon, Jean Piaget and Jerome Bruner.

John Dewey believed "Everything depends upon the quality of the experience which is had" (Dewey, 1938, p.27). He recommended that the educator should "arrange" the experiences for their learners. The educator should know where the experiences are leading the learners so that they can benefit from it. If the educator does not have an insight to the value of the experiences, Dewey believed he/she was "disloyal to the principle of experience" (p. 38). These recommendations were made to prevent the learner from being "turned off". Dewey (1938) believed bad

experiences could prohibit the learner from having desirable experiences in the future. "Every experience lives on in further experience" (p. 27). The problem of education based on experiences, is selecting those experiences that will promote growth and learning and will enhance future experiences.

Dewey believed there are some experiences considered more valuable educationally while others are not. Dewey (1938) believed each educator should ask the following questions to evaluate learning experiences:

> . . . Does this form of growth create conditions for further growth, or does it set up conditions that shut off the person who has grown in this particular direction from the occasions, stimuli and opportunities for continuing growth in new directions? What is the effect of growth in a special direction upon the attitudes and habits which alone open up avenues for development in other lives? (p. 36)

Dewey summed up experience as one that should arouse curiosity, strengthen the character of the learner and fulfill the purpose for which it was designed.

Kurt Lewin, responsible for T-Group and laboratory training, gave credence to the importance of subjective experience. Kolb (1983) stated that during this time (1946) this emphasis was in strong opposition to the behaviorist theories of learning and the classical physical science definitions of knowledge.

In 1946, Lewin was called in by the Director of Connecticut State Commission on Interracial Commission.

The purpose of Lewin's visit was twofold:

1. train group leaders; and,
2. conduct research by finding the most effective ways for combating racial and religious prejudice in the communities.

Lewin's visit led to the origin of the National Training Laboratories in 1947.

While conducting his research, meetings were held to investigate what subjects the participants expected to learn while participating in the workshops. Discussion was encouraged by the trainers in workshops. After the series of workshops, most trainees went home but the few who stayed on campus asked to sit in on the trainer's feedback session. This was the beginning of "feedback" in T-Group. Lewin and his colleagues noted that trainers' interpretations of what went on were different from that of the trainees. This started the idea of subjective experiences.

> . . .Immediate personal experience is the focal point for learning, giving life texture and subjective personal meaning to abstract concepts and at the same time providing a concrete, publicly shared reference point for testing the implications and validity of ideas created during the learning process. When human beings share an experience they can fully share it, concretely and abstractly. (Kolb, 1983)

As a result of Lewin's work, training and development specialists have made some changes in their approach. They added to their repertoire of methods,

simulation experiences to enhance the growth of learning in their adult learners.

Chris Argyris and Donald Schon (1971) emphasized experiential learning. They believed that experience is essential for individual and organizational effectiveness. They stressed that experiential learning can only occur in situations where personal values and organizational norms support action, based on valid information, free and informal choice, and internal commitment.

Jean Piaget was another contributor to the idea of experiental learning. After many years of study, he provided evidence on how intelligence is shaped by experience. He proved, in careful descriptive studies of children from infants to teenagers,

> "that abstract reasoning and the power to manipulate symbols arise from the infant's actions in exploring and coping with the immediate concrete environment. The growing child's system of knowing changes qualitatively in successively identifiable stages, moving from an enactive stage, where knowledge is represented in concrete actions and is not separable from the experiences that spawn it, to an ikonic stage, where knowledge is represented in images that have an increasingly autonomous status from the experiences they represent, to stage of concrete and formal operations, where knowledge is represented in symbolic terms, symbols capable of being manipulated internally with complete independence from experiential reality". (Kolb, 1983, p. 13)

Piaget's work was not fully recognized until Jerome Bruner. Jerome Bruner, an American cognitive psychologist, actively sought for a theory of

instruction. By examining the cognitive developmental stages, Bruner thought that a plan of instruction could be designed in such a way that the subject would correspond to the learners' age or stage of cognitive development. This philosophy spurred on a new movement in education. Bruner had focused on the idea of designing experience-based educational programs using principles of cognitive-development theory.

David Kolb believed that the history of experiential learning began with Dewey, Lewin, and Piaget's philosophies. Kolb stated these men have had a profound effect on education in public and private organizations, contributing to our understanding of the learning process and of the important role experience played in it. They also influenced Kolb to base his experiential learning model on their philosophies. The experiential learning model is an integration of knowledge on cognitive development and cognitive style. It represents a learning process model that recognizes the structure of human cognition and the stages of human growth and development. The model also conceptualizes the learning process in such a way that individual learning differences are recognized as well as the impact of the learning environment to these learning differences. The experiential learning model is a four stage cycle. The four stages are described as the following:

1. Concrete experience - the learner is fully involved and without bias in the experience.
2. Reflective experience - the learner observes and reflects on the experience from many perspectives.
3. Abstract Conceptalization - the learner creates concepts that integrate his/her experience into sound theories.
4 Active Experimentation- the learner uses the theories to make decisions and to solve problems. (Kolb, 1984)

Kolb believed that learning requires abilities that are polar opposites: (a) The concrete experiences at one end and the abstract conceptualization at the other end. (b) The active experimentation as one extreme and the abstract conceptualization as another. Kolb believes that each learner must continually choose among these learning abilities which he/she uses in any learning situation, depending upon the primary category of abilities most often implemented.

In 1976, the Learning Style Inventory was developed by Kolb. The purpose of this inventory was an attempt to categorize an individual's primary learning style according to the relative emphasis placed upon the four different kinds of abilities. Kolb identified four known dominant types of learning styles. They are the following: (a) the converger, (b) the diverger, (c) the

assimilator and (d) the accommodator.

The following brief description of these four learning styles is from Kolb's LSI Manual:

1. The Convergers- Their dominant learning abilities are abstract conceptualization and active experimention. Their greatest strength lies in the practical applications of ideas.
2. The Divergers- Their learning strengths are opposite to those of the Converger. They are best at concrete experience and reflective observation. Their greatest strength lies in their imaginative ability. They excel in their ability to view concrete situations from many perspectives and to organize many relationships into a meaningful "gestalt".
3. The Assimilators- Their dominant learning abilities are abstract conceptualization and reflective observation. Their greatest strength lies in their ability to create theoretical models.
4. The Accommodators- Their strengths are opposite to those of the Assimilator. They are best at concrete experience and active experimentation. Their greatest strength lies in doing things. They are more of a risktaker and they adapt themselves to specific immediate situations.

Kolb also notes,

1. The convergers are un-emotional. They rather deal with objects rather than people. People who fall into the converger's category tend to have narrow interests and often specialize in the physical sciences. Kolb further states (1981) that this learning style is characteristic of many engineers.
2. The divergers are interested in people. They are imaginative and emotional. They have broad cultural interests and tend to specialize in the arts. Kolb states this learning style is characteristic of people with humanities and liberal arts background.
3. The assimilators are interested in abstract concepts but unconcerned with the practical application of theories. Like the converger, they are not people-oriented. The assimiltor's learning style is characteristic of people in the basic sciences and mathematics fields.
4. The accommodators are risk takers. They excel in situations that require them to adapt to specific and immediate circumstances. Accommodators are interested in people. However, people often labeled them pushy or impatient. The accommodator's learning style is characteristic of people in business or technical fields.

Kolb states that these learning styles should not be

used as stereotypes. Nonetheless, one should value the knowledge of knowing about the different learning styles because it addresses the diversity and complexity of the cognitive process and their manifestations in behavior.

Kolb based much of his theory testing on the college student and higher education. One of his many research projects (1973) focused on whether the student's performance is affected if there is not a match between the student's dominant learning style and the discipline's demanded of a particular learning style. Kolb and Goldman (1973) studied MIT students from four departments and found that student's performance is affected as well as the student's ability to adapt to the curriculum if there is a mismatch between student's learning style and the learning style demands of different academic disciplines. Kolb pointed out that his research showed undergraduate education was a major factor in shaping individual learning styles. This shaping happens through either the socialization of the course learned in that particular discipline or the individual's own selection to adapt to the learning style most often used in his/her specific discipline.

In the past, colleges and universities were only interested in the abilities needed to go through their academic disciplines, not recognizing the different abilities and learning styles of students as well as within each discipline. Since the early seventies,

research and theory have focused on intellectual development and cognitive style, forcing colleges and universities to address how students come to know the academic world and how to cope with it.

Experiential learning was implemented in different settings well before colleges and universities. Chickering, Rhett & Sansregret cited examples. A. W. Chickering, (1977) states experiential learning has a deep history. He explained that the craft guild and apprenticeship system provided much of the advance training from the medieval period through the industrial revolution. At the turn of the century, several major areas of professional preparation required direct experiences and practical applications as an integral component in their program. The problem, however, confronted by educators in the initiation of experiential learning was finding the combination that was most effective for the person doing the learning and for the materials to be learned.

Walter P. Rhett (1979) believed experiential learning found its beginning in Africa. Rhett stated Africans constantly watched each other while working side by side. They relied on non-verbal, experience-based learning for skill development and instructions. Experiential learning was essential to learn the necessary tasks and to learn how to prevent exhaustion and overwork.

Martha Sansregret also mentioned that experiential learning is an old concept. She (1984) stated since the beginning of time people learn by "trial and error". The concept "learning by doing" was integrated in the university when Yale (1830) decided to have its students work in laboratories. Later in 1870, Johns Hopkins had its medical students involved in practical training by visiting patients in the hospitals. Both schools believed that practical experience enhanced the learning process. Sansregret stated at this time only medical students benefitted by experiential learning. Not until World War II, were soldiers able to benefit from experiential learning. Soldiers were being taught high level skills which they wanted recognized and credit for when they returned back to school. Since then, experiential learning had been widely accepted and used. Between 1973 to 1981 it had become a widely accepted method of instruction by many colleges and universities. It was most popular and often used by the "nontraditional" schools.

The recognition of the adult learner's prior learning became necessary. The Council for the Advancement of Experiential Learning (CAEL) was developed in 1974. The CAEL contributed to the research of developing and improving practices that lead to the accreditation of prior learning. The popularity of experiential learning continued to increase. Many

questions were being raised on how to assess and give credits to prior learning experience. Again in 1974, the Cooperative Assessment of Experiential Learning project (CAEL) along with the Educational Testing Service developed an assessment tool. The tool was created as a valid method to assess what individuals have learned through prior work and living experiences. Today, colleges and universities continue to incorporate ideas of experiential learning. Programs such as internships, cooperative education, studio arts, laboratory studies and field projects are some examples of how experiential learning is being used. These programs give the learner direct contact with the principle of experiential learning as opposed to just thinking about what it might be like. Sansregret (1980) identified two major forms of experiential learning that were being used in the colleges and universities:

1. sponsored experiential learning such as field work and internships, which takes place away from the classroom but is planned and/or supervised by a faculty member; and,
2. prior experiential learning, which includes both intentional learning, such as self-directed study or non-credit courses, and incidental learning from paid or unpaid work as well as other life experiences.

Sansregret (1984) also identified three methods

generally used for identifying prior learning. One of the methods were tests, standarized or teacher made. They are specifically designed for assessing prior learning. The other method is giving credits for courses offered by industry, business, community groups and voluntary organizations. The last method is individualized assessment. This can happen through a personal interview, a portfolio or other techniques that demonstrate what a person knows or is able to do.

Although experiential learning had already been utilized by colleges and universities, it became necessary to utilize this approach in full force. Kolb stated that during the seventies, colleges and universities were also facing a major change in their make-up of students due to the open enrollment policy, e.g., more older students, more minorities, and handicapped. As a result, these institutions had to address the diversity of the student's population and needs. He believed that many of these students were not accustomed to the rigorous socialization of the classroom and textbook learning. Therefore, a strategy was necessary to somehow translate the abstract ideas of learning into the practical living experience they had encountered. Experiential learning could do just that.

Nancy Dixon and Christine Williams recognized a change in the make-up of the student population. Dixon (1985) stated the growing diversity of students in the

classroom, and with the realization that these individuals have their own ways of learning, had educational institutions looking into learning style information techniques. She declared that learning style information should be viewed as a way to improve teaching effectiveness to the diverse population now in the classrooms. Christine Williams (1984) believed the experiential learning model had great potential for addressing the diversity of learners found in an educational setting. She believed if students knew their learning style, they could used this mode of learning to acquire skill, knowledge, and attitude as well as strengthen other learning modes necessary for learning. Williams stated that the most effective learner was one who had the abilities to use whatever learning mode required for the learning situation. Additionally, Williams stated learning style differences were often not taken into consideration when a curriculum was being designed. Most often, educators utilized their learning mode as the common base for teaching. Williams suggested that a curriculum incorporate the four learning modes, then each learner could "plug in" to his/her preferred learning style. The learner would also build other modes as well. Williams pointed out that educators may find this task time-consuming, feeling that a new curriculum has to be designed. However, a new design is not necessarily

needed, possibly a revision will suffice. Williams stated time should be taken to evaluate the existing curriculum by going through the experiential learning model cycle. This will provide educators with an assessment of knowledge areas that need to be revised and improved in order to incorporate all learning modes. Williams asserted that this curriculum design gives the educators the opportunity to improve student learning by allowing them to utilize all four learning modes thereby building a complete learner.

Not only did colleges and universities have to address the diversity of students, they also had to address the large portion of adults back in school. As more adults went back into the classroom, they demanded their experience and wisdom be recognized and counted as important. Colleges and universities began granting credits for prior learning as a way of addressing this demand and they began assisting adults learners in understanding the learning process.

Michael Mark and Betty Benson (1982) believed in order for adult learners to understand the learning process, adult learners needed courses that would help them understand themselves and their learning styles better. Their portfolio course was redesigned to aid in this better understanding. The staff at the Ohio University realized that it was equally important for the learners to complete the portfolio process with a

better understanding of themselves and an improved self-concept. The staff decided that Kolb's experiential learning model and the use of his inventory would stimulate self discovery. The staff asked the following questions:

1. How do the theory and learning style inventory assist learners to articulate their learning and separate learning from experience?
2. How do faculty actually use the model and the inventory in the course?
3. What are the benefits to faculty? (p. 69)

The use of Kolb's learning model and Learning Style Inventory could be viewed as instructional aids. The authors believed these two techniques taught students how to extract their learning from experience, articulate those things learned and then equate those to specific college-level learning objectives found in the course syllabi and course descriptions. They also provided two systematic ways for adults to explore their prior learning:

1. The model and the LSI helped the instructor to identify specific characteristics of the adult learners in his/her classroom.
2. The model and the LSI provided students with knowledge of their learning style and aided in the decision of the type of educational activities the students will pursue.

Discussion and Critique of Experiential Learning

Although experiential learning had become a house-hold name in higher education, it still received criticism and skeptism. Chickering, Joiner, Brown, Lipsett & Avakian, Dixon and Freedman & Stumpf are individuals mentioned who had doubts about the use of experiential learning. Chickering (1977) stated there was a dilemma in using experiential learning. He believed experiential opportunities are offered long after the theoretic studies have been taught.

Bill Joiner, in his 1986 article, "Dilemma in Experiential Learning Programs: Toward a Holistic Approach" stated there was not a dilemma but three dilemmas in experiential learning. He recognized the dilemmas between theory and practice. He believed the practicums or field experiences prescribed by colleges tend to be non-theoretical. Colleges did not help students reflect upon the theory of action in the practicum, so interpersonal and intergroup conflicts within an organization were not talked about. In summary, the learner was not competent at perceiving and diagnosing the context of his/her relationship to the experience, his/her supervisor, peers and the full working situation whereby allowing for critical reflection, dealing with issues of identity, authority

and social comparisons.

F. Gerald Brown (1980) stated that very few people have explicit training in learning to learn from their own experiences.

Nancy Dixon (1985) stated teaching to an individual learning style, the preferred way the student feels he/she grasps information successfully, had not been widely accepted and practiced for many reasons. She believed this was another dilemma in experiential learning. Dixon stated three reasons for this:

1. A learner has many styles of learning. Matching instruction to multiple styles becomes more complex than matching to only one style.
2. A learner has different learning styles to different subjects. A learner may prefer group work and tapes for communications studies but prefer programmed instruction for math. This is believed to be difficult to assess and requires a lot of time and work.
3. Lastly, a teacher having a large number of students to teach find it difficult to address every students' individual learning preference.

She emphasized however that teachers were interested and did acknowledge learners having individual learning styles but they raised concerns for a realistic implementation of this process for the number of students they teach.

Dixon attempted to address this concern by asking, how can learning style information be used to increase learning? She (1985) suggested five ways in which this could happen:

1. help individuals understand themselves as learners - assist students in identifying how they will better learn the content of the material to be taught;
2. encourage students to expand their learning styles - make them aware of other learning strategies to use to grasp and transform information;
3. use a variety of instructional approaches - teach in a variety of ways so that the learner can understand his/herself as a learner, or stated as an administrative issue, select teachers based on their varied teaching styles;
4. create an environment in which diversity can thrive - use outside resources, the other students, other instructors and the community to learn; and,
5. create a climate in which collaboration exists - create an atmosphere where students use each other for assistance and as resources to each other. Create an atmosphere that is learner-centered. The emphasis is placed on the learner and your role is to facilitate the

learning. (p. 16-18)

Laurence Lipsett and A. Nancy Avakinn (1981) criticized the portfolio method that has been used by colleges to establish credits for the experiential learning of adult students prior to their enrollment. They stated that Empire State College had its students construct a portfolio which provided description and documentation of prior learning experiences. The authors critiqued this method. Their conclusions were based on reports that students and administrators made about developing a portfolio and evaluating one to determine credits to be received. Students and administrators reported the following:

1. students found the portfolios difficult to prepare;
2. students found it a problem to identify the learning and to differientiate it from experience;
3. students found it difficult to write a portfolio because they lack the basic skills of expository writing;
4. students found it difficult to relate the experiential learning to the degree objective;
5. administration found it difficult to evaluate experiential learning especially if the student was interested in a discipline outside of their expertise; and,

6. administration found it difficult to charge tuition fee or stated assessment fees.

Freedman & Stumpf (1980) stated in their article, "Learning Style Theory: Less Than Meets The Eye", that they found the LSI to be an unreliable instrument. They believed the instrument was designed in such a way that its results supported the learning style theory developed by Kolb.

Kolb attempted to dispell the criticism and skepticism by proving that experiential learning was not just another educational fad but a method with sound theoretical backing. It emphasized what people learned from their accumulated knowledge and experience instead of how they learned it.

Many researchers found experiential learning to be very effective. However, most of the research studied college students. Unfortunately, there is a scarcity of documention on experiential learning with the adult learner and/or experiential learning in the training setting. What has been documented, it appears corporate training programs utilize case study method, simulation exercises, and roles plays to address the concept of experiential learning. Training programs believe they were incorporating a new technology of learning that brought reality into the classroom. Notwithstanding, Wexley (1984) believed that frequent use of these methods warrant an attention to their effectiveness.

Wexley stated that the training literature revealed little empirical evidence that case studies, role plays, and simulation exercises could change skills and behaviors that transfer to the work situation. Chris Argyris for example, known for the concept of "double-loop learning" argued that the case study method did not reinforce double-loop learning. He (1980) defined double-loop learning as "when the detection and correction of errors requires changes in the underlying policies, assumptions and goals" (Argyris, 1980, p. 29). Argyris believed that case studies were usually inapplicable to real situations at the job, thereby resulting in no transfer of learning.

Despite the lack of evidence of their effectiveness, trainers still utilized these methods and saw them as a way of generating active participation and practice for trainees. Two examples will be discuss on how experiential learning methods were implemented in corporate training programs.

Helen LaVan and Cameron Corley (1984) believed an evaluation was needed to determine its effectiveness as a method, and how best experiential learning can be used in order to serve those trainees who have valuable experiences related to their jobs. LaVan & Corley wanted to assess experiential learning techniques that have been used for learning reinforcement. They believed that from the perspective of the learner, who

has some background knowledge in the subject, he/she might gain more from an experiential training session than from conventional methods. They also believed that employers might be able to serve an individual better as well as save money by assessing if an employee/learner could gain the most from either experiential or non-experiential training formats.

The objective of this study was to determine: (a) the extent to which performance was improved as a result of a structured experiential learning situation; (b) the extent to which experiential learning increase the frequency of and quality of the learning behavior; and, (c) the extent to which it enhance the learner's confidence in his or her knowledge.

Fifty-three participants were given a twenty-three item questionnaire before taking the course. This same questionnaire was also given after the completion of the course. The questionnaire was a three point Likert scale with two additional questions: (a) evaluate the extent of your knowledge in each of the functional areas of personnel administration; and, (b) list as many terms, concepts and issues as you can under each of the following areas of personnel administration. The course was labeled a seminar whose format was based on experiential exercises from Whatley and Kelley (1977) as well as other resources not mentioned. The experiential exercises were of simulation type in order to give the

participants experience in personnel/human resource administration duties. Each exercise lasted from 45 minutes to 1-1/4 hours.

The results of the scores were surprising. The means and standard deviation of the test, pre-test and post-test were presented. The results showed the "confidence of knowledge scores" went up from pre-test to post-test but only these scores went up. In fact, some of the scores decreased.

The researchers believed the findings were based on:

1. small sample size;
2. no central group and experimental group;
3. instruments used to measure the learner's confidence and knowledge were limited in scope;
4. the question "extent of knowledge" does not ascertain the amount of knowledge the participant may have actually learned; and,
5. the use of cases might have possibly provided more knowledge than exercises.

Connelly, Piper, & Salvendy (1984) conducted a study titled, "Variables Related To Reported Learning in Brief Experiential Groups Held at Professional Meetings". The purpose of this study was to examine what was learned in general psychodynamic groups and what was associated with learning. They examined what the participants reported they learned and the variables they believed might be related to the participants' learning. The

researchers selected four variables they believed would be related:

1. demographic characteristics of the participants;
2. perceptions of group climate;
3. perceptions of cohesion; and,
4. perceptions of leader's qualities and style.

The data was obtained from 119 participants who attended the annual meeting of The American Group Psychotherapy Association and The Canadian Group Psychotherapy Association. Two-thirds were women and one-third were men. The women's average age was thirty-six and the men was thirty-eight. Seven to ten groups were formed.

The central focus of the meetings were learning about group processes and dynamics by exploring and understanding group tension and conflict. This was accomplished through discussion on events and experiences in the here-and-now of the participants. A questionnaire was constructed to examine what was learned and the factors contributing to this learning. The four variables were examined to see if a relationship existed between the four variables and the learning obtained within these groups. Participants were asked to rate the leader, group and their learning.

The researchers found, based on the results reported, the participants learned more about themselves through a brief group experience but learning how to be

a group therapist would require "some comprehensive training".

Implications

The theory of experiential learning has been given with documentation supporting its theory or not supporting it. The use of experiential learning and knowlege of one's learning styles have many implications for the adult learner and the trainer. For the adult learner, he/she must be aware of his/her learning styles. The adult should know how best he/she learns. This information would prevent the adult learner from engaging in academic pursuits not compatible to his/her learning style. This information could also be used to evaluate what learning modes need to be strenghten in order to accomadate courses or materials to be learned. Adult should be aware that this type of information can be made available to you. They should seek this information from career offices or career centers. Knowing yourself as a learner, provides the adult with a road map, having guidelines that will aided in choosing avenues that are compatible for the adult learner.

The adult comes to the classroom full of knowlegde because of his/her experiences. Experiential learning gives the adult learner opportunities to get credit for prior learning and experiences, allowing one to focus on

skills needed to be learned. However, the adult must realize that assessing prior learning is not an easy task. Training is needed to learn how to identify those skills and experiences already learned so that learners can receive credit. Exercising experiential learning also helps the adult learner obtain the necessary experiences employers are looking for, making them competent to compete in the working world. Experiential learning provides many benefits to the adult learner. Adults need to recognize the value of this method and evaluate it as a possibility for furthering their academic career.

The use of experiential learning provides many opportunities for the trainer. Experiential learning could be used as an assessment piece to identify what skills and experiences need to be taught, thereby designing your curriculum around that. It also aids the trainer in identifying the learning styles of their learners. This way, many strategies could be incorporated to address the diversified learning styles in the training classroom. Trainers must be cognizant of and able to administer the assessment scales that identify learning styles. Additionally, they must be able to take this information as well as their knowledge of the learner and combine them to suit the individual learner. This takes time and skillfull knowledge of the theory, the curriculum and the learner.

Using experiential learning requires the trainer to be very resourceful so that you will be able to identify resources and experiences beneficial for the adult learner. When training the recruiter, this is important to note. Recruiters' responsiblity is to interview job applicants with the intention to select the most qualified candidate. Knowing how to interview is very crucial. Recruiters could benefit from using experiential learning methods. Trainers can employ simulation exercises, roleplays or conduct mock interviews which will give recruiters experience in interviewing. It appears that experiential learning is another method at the corporate trainers disposal that could be utilized to perfect the interviewing skills of their recruiters.

The use of experiential learning would benefit other employees as well. Having practical experience and taking relevant courses is important to the adult learner. Trainers could market their training program as stimulating and pertinent, creating courses that are offered only because there are needed not because its in an established curriculum.

Jack Mezirow

Perspective Transformation

Within the adult education literature, the term

perspective transformation most often is defined as:

> . . . the emancipatory process of becoming criticallyaware of how and why the structure of psycho-cultural assumptions has come to constrain the way we see ourselves and our relationships, reconstituting the structure to permit a more inclusive understanding. (Cole, 1985, p. 19)

This is gathered from a thorough review of the literature which reveals there is very little information on perspective transformation. In fact, the term seems to be rarely used. When it does appear, it is used in relation to visual perception. However, there is an abundance of information that could be considered related concepts. Based on the definition of perspective transformation, these concepts are only a part of what the true meaning is. Mezirow's perspective transformation was built on the ideas of the German philosopher and sociologist, Juergen Habermas. Habermas believed that the adult has three primary cognitive interests: (a) the technical, (b) the practical, and (c) the emancipatory. The technical is task related which focuses on work. The practical is an interpersonal understanding of life. The emancipatory involves the "perspective transformation". Three articles will be cited to introduce perspective transformation. Two articles, "Toward a Theory of Practice" and "Education of Perspective Transformation Women's Re-entry Programs in Community College" were wriitten by Mezirow. The other article, Achieving

Perspective Transformation, a dissertation written by Jens Nowak.

In Mezirow's article, "Toward a Theory of Practice", he (1971) stated that the lack of a theory for the particular use of adult education had pursuaded him to research and study the adult learner. Based on his studies, Mezirow suggested a rationale and strategy for developing a sound research-based body of theory that was applicable to adult education. This theory was such that educators could understand and use it to predict behaviors of adults in educational situations. Mezirow stated "he is offering research-based qualitative theory, applicable to adult education and capable of indicating dependable and practical guidelines for policy and program decision making.
(Mezirow, 1971, p. 136)

Mezirow believed that current learning theories negate the critical role the "meanings" adults put to things or experiences. Mezirow (1971) defined meaning as:

> . . . the expression of an individual's attitudes, feeling, memories, sensations, and ideas evoked by his perception of a thing and the collateral suggestion that the meaning of an object can be explained by isolating the particular psychological elements which produce it. (p. 137)

He believed adults constructed meaning through an active process of interpreting what was going on in their situations. Mezirow maintained that research in

education neglects to look at the critical role the individual plays in determining the course of his/her own behavior. The individual interprets the meaning of the situation in response to reactions and anticipated reactions of others. He believed if these considerations were taken into account, effects of other variables could be checked. Mezirow (1971) stated:

> . . . a practical theory of adult education will focus on the process of social interaction with the learning situation to 'get inside of the defining process' of those involved with each other in the educational enterprise. (p. 138)

He stated that this type of theory will do the following:

1. examine the learning situation differently;
2. examine the adult learner differently;
3. examine the ways adult learners, instructors, change agents, program administrators and others interact among themselves and with each other to form and use meaning; and,
4. examine how the institution functions as a result of people taking joint action, behaving in a way that is different to behaviors typical of one that has been imposed on us because of "systems" requirements.

Mezirow concluded that theory, based on sound data in research, involved the development of conceptual categories readily applicable to and indicated by the

data and relevant to an explanation of the behavior under study. The theory required continual testing of its validity against comparable situations under study.

In Mezirow and Marsick 1978 article, "Education for Perspective Tansformation. Women's Re-entry Programs in Community Colleges", they examined factors that impede or facilitate the progress of re-entry programs for women who wanted to re-enter an educational program after an hiatus, postponement for the purpose of career change, finishing a college degree or considering employment. The authors stated that re-entry programs grew through the sixties but gained its notability in the seventies. The emergence of re-entry programs was a result of the women's movement and the number of women returning to college. Two types of programs existed:

1. one that was strictly academic, for the purpose of meeting a degree requirement; and,
2. another that provided workshops, for the purpose of exploring careers.

The authors were looking to identify the process of perspective transformation. Mezirow and Marsick were examining the psychological structures within which women locate and define themselves and their relationships. They believed:

> . . . By recognizing the political, social, economical, psychological and religious assumptions that shape these structures -- presuppositions inherited but rarely examined critically -- we can reconstruct our personal frame of reference, our self-concept, goals and criteria for evaluating

change. (Marsick, & Mezirow, 1978, p. 7)

Perspective transformation is the central process occurring in the personal development of women participating in re-entry programs. The authors believe perspective transformation is a generic process of adult development. It is a kind of learning that enables the adult to move through critical transitional periods of adulthood. They further state it is a praxis, a dialect in which the female understands her state of being and then puts change into action. This is often done after the female has decided she can achieve the skill, knowledge, or attitude necessary and has committed herself to an action plan for the transformation to take place. However, they believe perspective transformation occurs when a "painful appraisal" of women's current perspectives are in focus. Mezirow and Marsick cite some examples, e.g., death of a spouse, divorce, loss of a job, and retirement. They state that these upsets of adulthood can dissociate women from previous modes of living and bring them to question their identity and direction of life. As a result, women begin to explore new ways of living and make provisional efforts to try out new roles; thereby playing the new roles which will build competence and eventually self confidence. To achieve perspective transformation, the authors stated a course of action must be planned. A well thought out

plan will acquire the knowledge and skill for implementing one's plan. Finally, how one will re-enter into society on one's own terms with a new inner-directed stance is necessary. Mezirow and Marsick believed there was a cycle an individual follows when engaged in the transformation process. The transformation cycle is described as containing:

1. disorienting the dilemma;
2. self-examination;
3. assessing sex-role assumptions;
4. alienating taken-for-granted social roles and expectations;
5. relating one's discontent to a current public issue;
6. exploring options for new ways of living;
7. building competence and self-confidence in new roles;
8. planning a course of action and requiring knowledge and skills for implementing one's plan;
9. making provisional efforts to try new roles; and,
10. reintegrating into society on the basis of conditions dictated by the new perspective. (p. 12)

Mezirow and Marsick (1978) found, from examining re-entry programs, that their major emphasis were direction-finding. They also found that direction-finding methods and the goals of perspective

transformation had not yet been well established in the colleges and universities. Very little duplication was seen on standards and practices. However, direction-finding was used to stress women "getting in touch" with themselves. This was usually achieved through:

1. individual or group counseling by peers and professionals;
2. rap groups;
3. aptitude and interest testing; and,
4. one or a series of credit or noncredit courses.

In 1981, Jens Novak wrote a dissertation titled, Achieving Perspective Transformation. In his dissertation, he addressed the lack of information on this subject. He stated there is information on related concepts, i.e., hierarchical restructuring, cognitive restructuring, self actualization, breakthrough, the fourth way, altered consciousness and social transformation. He believed these concepts are related to, but do not encompass, the total condition of perspective transformation.

Novak also questioned Mezirow's concept of perspective transformation. He stated Mezirow did not address the total conscious change from old patterns to new patterns of behavior. He believed this change represented a new level of functioning which moved the adult from passive to active involvement in his/her

evolution. He categorized Mezirow's idea as "conscious transformation". Novak stated that this was a step toward perspective transformation. He explained that conscious transformaion was actively seeking change or exercising control over one's life. This conscious transformation led to seeking other conscious transformations which eventually involved a total life change thus achieving perspective transformation. Novak (1981) defined perspective transformation as:

> . . . the conscious change from old to new behavioral patterns. It represents a new level of functioning which moves from passive to active involvement in one's own evolution. The person who has experienced perspective transformation views the world through a new schemata -- applies a new template to his/her actions. Whereas the escalation into perspective transformation is achieved by orderly progression, culminating in a sudden breakthrough, it may also be discontinuous, achieved in spurts of leaps as a series of smaller breakthroughs escaluate the individual to the all-encompass breakthrough which characterizes perspective transformation. (p. 1)

Novak further stated that perspective transformation is not only seeing the world from a new perspective but also living from that perspective. It is internalized to the point that it is reflected in the individual's functioning.

Novak (1981) asserted there are three conditions necessary to achieve perspective transformation. They are the following:

1. conscious experiencing - feeling of the interaction between mind and body;

2. awareness and acceptance of six fundamental principles (polarity, causality, force, reality, change and responsibility) that give access to alternative perspectives; and,
3. development of three abilities (faith, courage, and freedom) which make the internalized principles operational.

Novak concluded that perspective transformation is not an objective experience, one where a formula or guide could be prescribed to follow. He stated it is a subjective experience, an internal process that occurs differently with each individual. Nevertheless, the author suggested techniques the adult learner could follow to help break away from the learned structures that interfere with his/her capacity to achieve perspective transformation. Novak suggested the following:

1. the adult learner must work on the three conditions to perspective transformation; and,
2. the adult learner must learn ways to build self help.

The theory of perspective transformation has been presented through the perspectives of Jack Mezirow, Victoria Marsick and Jens Novak. The lack of information prevents a discussion on its effectiveness as a theory put into practice. However, it is important to note that Mezirow did introduce a theory which

recognized the mind's function in the learning process and its effect on adults' perception of things. Additionally, he provided a theory that addressed the limitations society and adults' past place on them and offered a strategy to transform from it.

Implications

The implications of perspective transformation upon the ability of adults to transform into a totally self-actualized adult learners could be frightening. Initially, the adult must accept the need to change, introspectively determine what needs to be change and then identify an action plan that will successfully make the change the adult is striving for. This self analysis is frightening, because it requires the adult to analyze him/herself and then initiate the process of change. For some adults this analysis could be unpleasant. An indivudual may find:

1. he/she does not like the person he/she finds inside him/herself;
2. he/she may find him/herself in an oppressive situation;
3. he/she may find difficulties in making the transition to better deal with their environment; and,
4. he/she may find it difficult to interpret the

effects transformation will have on family, friends and close associates.

Another frightening thing, about this analysis is the decision which must be made. The decision which is faced is "what do I do based upon the results and findings of the analysis?" The adult must know how to go about the change and must know what resources or assistance is necessary to aid in the change. Additonally, the adult must have the will power and commitment to change. Since perspective transformation is described as an individual process, caution should be taken by the adult to insure he/she does not label it "a stage in life". For the stage of life suggests a period of change which perspective transformation implies a "new" awareness that is long lasting.

There are implications for the trainer as well. Over and above what the trainer experienced going through perspective transformation, applying perspective transformation to a training setting can be a rewarding experience for trainees as well. This concept incorporated in a training program for recruiters would be very valuable. Interviewing is the most common technique used by recruiters in order to get to know an applicant. Interviewing is also a subjective way to determine what applicant is right for a job. Often times recruiters' judgements are based on what they believe makes a "good" candidate or their decisions are

based on the "corporate culture" of their company. Perspective transformation would be a good training exercise that would address the subjectivity in interviewing and would confront the biases and prejudices that influence who are "good" candidates. Additionally, an exercise in perspective transformation will allow recruiters to look again at the "corporate culture" and point out the role they play in determining this culture. In order to achieve these goals, there are responsibilities and tasks which must be accepted and acted upon by the trainer:

1. to verbalize what the adult is going through;
2. to provide feedback to make the process complete; and,
3. to insure the trainer-employee-manager transformation process in the workplace is successful.

Summary, Analysis and Discussion

The lack of empirical data on how adults learn have plagued the adult education field for sometime. This shortcoming has resulted in a slow evolution of establishing an adult learn theory. Lindeman, Knowles, Skinner, Tough, Kolb and Mezirow have, during their time, aimed to quicken the evolution by attempting to offer "theories" on how adults learn. Although the six

men do not provide a theory to the adult education field, they do provide a foundation in which one could be build upon. Their knowledge about the adult learner has brought new understanding about the adult and consequently has provided the the adult learner with many learning options.

Lindeman and Knowles popularize the concept of andragogy. According to these men, the adult learner should be a partner in the planning, conducting, and the evaluation of the learning experience. Lindeman and Knowles critique the traditional method. They saw the learner as a passive recipient of an already prescribed curriculum; seldom is the curriculum learner-centered.

Eduard C. Lindemen suggested how he thought the structure of adult education should be when teaching the adult learner. His suggestions were based on his experience as an adult education teacher. He recognized a need for something "special", e.g., methods, curricula and teachers. To establish a theory of adult learning, Lindeman does not state what type of adult learners need special methods, curriculum, and teacher, nor does he specify under what conditions or in which contexts this is applicable. Additionally, Lindeman was not verifying a known fact on how the adult learner learns thereby suggesting a curriculum design that will address the learning needs of an adult. Lindeman generated assumptions, assumptions based on his experience.

However, Lindeman analyzed the adult learner and was able to determine that "special" methods, curriculum and teacher were needed to teach the adult effectively. Lindeman contributed to developing an adult learning theory by offering a curriculum design different from conventional practices; and, it is that differences that warrants an examination on the adult learner. Further, he provided a curriculum that could be tested to determine differences in how the adult learns in order to justify an alternative curriculum. Up to this point, Lindeman had offered curriculum and direction; that direction being:

1. which components of the curriculum are adequate;
2. which components could be incorporated into an adult learning theory; and,
3. which components required further research and development.

Malcolm S. Knowles' andragogical model is based on Lindeman's philosophy about the adult education curriculum and the adult learner. Again, Knowles' model gave suggestions on how the adult learner could be taught. Knowles does not describe or state what population of adults the andragogical model was appropriate for or specify in what conditions or context the model was applicable. Knowles himself recognized these shortcomings and declared andragogy as a method rather than a theory. At the same time, his position

about the adult learner and the child learner changed. Knowles recognized he was not verifying a known fact that adults learn differently than children. Nor was he testing a curriculum to justify the assumption that there is a difference between adult and child learning. From his experience as an adult educator, he recognized characteristics of the adult learner which were similar to those identified by Lindeman, thereby building upon Lindeman's ideas. As a result, Knowles offered similar suggestions about the adult learner and curriculum but does not test them in order to offer a theory of adult learning.

Knowles' andragogical model is however a step closer to the development of an adult learning theory. By Knowles re-examining Lindeman's four components of adult education and offering a similar curriculum, a formulation of how adults learn could be established.

B. F. Skinner is the most influential behaviorist of his time. According to Skinner, behavior is shaped and maintained by its consequences. He believes the outcome of a desired behavior is contingent upon positive or negative reinforcers. Skinner views the learner as an organism acting as a result of a stimuli originated in the external environment. Based on this theory, Skinner introduced programmed instruction and behavior modification as methods to use in the classroom. Skinner's principles of behaviorism are considered a

learning theory. He tested Thorndike's "Law of Effect" with animals, concluding that learning occurs through operant conditioning. Based on the behaviorism principle, Skinner introduced programmed instruction and behavior modification. The education field adopted Skinnner's learning theory as a way of understanding how students learn. Practioners in the training field adopted programmed instruction and behavior modification as methods for teaching job skills to employees. Again, Skinner offers to the education field a learning theory. His learning theory would not be considered an adult learning theory because most of Skinner's sample population were animals and children, concluding how learning occurs in general. Practioners in the training field, by the means of using programmed instruction, have implicitly adopted Skinner's philosophy of reinforcement. Skinner however, does not state, clarify or make exceptions on how adults learn. Nor does he specify whether the adult learner can benefit most from programmed instruction rather than conventional methods because of specific characteristics of the adult learner. Having learned through operant conditioning as a child, the adult learner was able to adopt to this method.

Allen Tough, influenced by the humanists, brought to focused the large number of self-directed adult learners. Tough offered a detailed account of how

adults go about learning. According to Tough, adults are being educated through their own planned learning activities rather than established educational institutions. Tough's intention was not to develop a theory about the adult learner. Tough's objectives were to seek information about adult learners and the learning activities they pursue in order to draw some basic conclusions and to report his findings. Tough came to some conclusions. He made a sharp distinction between adult learning and adult education. Tough stated that the traditional use of formal instruction and coursework have been replaced by self-instruction that places emphasis on relevant learning, reporting that adults are self-directed learners. Tough findings can be considered a great offering towards developing an adult learning theory. Based on several large sample surveys, he offers a hypothesis about the adult learner to be tested and provides a specific methodology to be used.

David Kolb, influenced by Dewey, Piaget, and Lewin, offered experiential learning. Kolb emphasized the important role experience play in the learning process. He also emphasized learning style differences. Kolb introduced "The Learning Style Inventory" which classifiess learners according to four learning modes. According to Kolb, each learner has dominant learning styles. He/she learns to adapt these styles according

to the learning mode emphasized in the learning situation. Kolb's experiential learning model is an integration of two existing philosophies on cognitive development and cognitive style, recognizing individual learning style differences and the impact of individual experiences on learning. Kolb tested his learning model on college students in a higher educational setting , using the Learning Style Inventory. Kolb's focal point in his experiential learning model was not the adult learner's experiences or individual learning styles per se. He was recognizing the impact of "experience" for all learners as well as identifying common learning styles that represent the learning population. Operating on the assumption that adults have a large reportoire of previous learning experiences that should be counted for, adult educators adopted Kolb's philosophy which recognizes the value of learner's experiences and prior learning. Additionally, based on the assumption that the adult learner is a self-directed learner and that the curriculum for adults should be designed around the learner, adult educators learned that utilizing the LSI provided information about the learning styles of the adult learner and provided guidance for designing a curriculum that would address individual differences. As a result, Kolb does not conceptualize an adult learning theory, but offers an assessment tool which provides adult educators with

information on how their adult learners process information, giving guidance in program planning. Kolb also provides adult educators with labels, "assimilator" and "accomodators", to categorize adult learners. As a result of Kolb's categorization, adult educators have conducted research to verify if, in fact, adult learners fall within these categories.

Jack Mezirow's perspective transformation acknowledged the interpersonal relationship between the learner and the "total" environment. According to Mezirow, the learner becomes totally aware of the psycho-cultural assumptions placed on him/her. As a result of this awareness, the learner rids him/herself from these assumptions or constraints and transforms into a "new" person. Mezirow's philosophy on perspective transformation is a new concept to the adult education field. The concept lacks a concise meaning that is recognizable and understandable to the adult education field which is one shortcoming in developing an adult learning theory. Although Mezirow offers guidelines on how to design an adult learning theory, Mezirow does not present perspective transformation as a theory as well as make it a household name in adult education field. Mezirow makes assumptions about the adult learner and tested his concept with women re-entering into community colleges.

Like the other theorist, Mezirow does not provide

empirical data that has tested his assumptions thoroughly, specifying the methodology used, the target population that will benefit from the concept, and the conditions or contexts under which the concept is most applicable.

Recognizing the need of an adult learning theory, Mezirow does offer detailed prescription on how to develop an adult learning theory, realizing this as a shortcoming of the adult education field. Further, Mezirow offers a different perspective on learning, recognizing the impact the total learning environment has on the adult learner. As a result, He provides a hypothesis to be tested on how adults learns and guidelines for developing an adult learning theory.

Lindeman, Knowles, Skinner, Tough, Kolb and Mezirow contribution to the field of adult education provided adult educators with theories about the adult learners. These theories have been translated into the following ten adult learning principles:

1. Adults are pragmatic learners.
2. A goal of the adult educator is to enable adults to become more self-directed learners.
3. Adults use their experiences as a guide in their choice of learning activities.
4 Adults learn best when they are actively involved in planning and evaluating the learning process.

5. Adults learn best when there is a good match between the teaching method and their learning style.
6. Adults have prior learning experiences that should be taken into account when designing learning or education.
7. Adults are problem solvers.
8. Adults learn best when they proceed at their own pace.
9. The development of self-evaluation skills are important in becoming a more effective adult learner.
10. The highest goal to which an adult educator can aspire is to make adults aware of the role of psychological, social and cultural factors in self-development; and, learn that this knowledge can be used towards their own adult growth and development.

Further Implications for the Trainer

The fact remains there is no one adult learning theory. Although this has been considered by some adult educators to be an advantage due to the diversity of the adult learner, the corporate trainer is left with the question of what theories do in fact address the recruiters who are adult learners and what theories

should guide their training practices. This situation presents a challenge to the trainer. The trainer is now left with some decisions to make. One decision is to extrapolate from existing learning theories and apply those that are applicable to the adult learners in the classroom. The most challenging decision to make is to pick up where the six theorist left off by continuing research in order to develop an adult learning theory. The direction the author presently envision is for trainers to do both. Skinner and Kolb each examined the "learner" and observed unique behaviors that deemed an explanation about how learning occurs. Lindeman, Knowles, Tough and Mezirow specifically addressed the adult learner, calling attention to the specific needs of the adult learner. At best, the trainer has some sensitivity to the adult learner and some guidance in the development of an adult learning curriculum. The trainer can now be creative in the design of the training program, offering many approaches to learning thereby marketing a diversified training program to fit the needs of the recruiters/employees. These theorists, most importantly, highlighted the individuality of each learner's learning need which the trainer must keep in mind when designing a training program. As a perspective trainer, the author recognizes that the trainer should be particularly sensitive to the impact of their personal interactions and relationships with

adult learners. He/she should make it a priority to determine the characteristics of each adult learner and to use this information in developing positive relationships with them. Additionally, the success of any training program is dependent upon the trainer and the learner:

1. identifying the correct learning needs;
2. designing an appropriate learning curriculum for the adult learner;
3. evaluating the curriculum according to its goals and objectives; and, the trainer has an added responsibility of
4. adopting the appropriate role in the learning process.

However, a trainer must keep in mind that an employer can influence the training structure by stating its preferences or stating requirements for particular methods of approaching employee learning. A common practice is controlling the learning to the point that the employer is able to "cut" facilities and dollars. The trainer, at this point, has some decisions to make. The trainer can succumb to the pressures of the organization by adopting existing practices being used in the organization's training program. The trainer can also de[c]ide to provide a study for justification of a new practice. The trainer should give considerable thought as to whether existing practices should be

eliminated. In order to begin further development of an adult learning theory in the field of adult education, the decision is obvious. Trainers must forge ahead in their companies and use their training classrooms as laboratories, providing additional knowledge about the adult learner or substantiating existing ones thereby creating and marketing an adult learning program as "state of the art". This could insure financial committment by the employer and dispell attitudes to what may seem to be an unnecessary expense.

Lastly, the trainer must remember for training staff to give up traditional training practices and adopt adult learning based-method, he/she has to change the perception of training in his/her organization in order to "sell" adult learning. This would require a full fledge training in order for other trainers to learn about the adult learner, how to teach the adult learner, and what role the trainers plays in teaching adults, calling for a "perspective transformation" to successfully implement this training process.

The Recruiter

Part II

This section of the literature review will discuss training practices for recruiters who recruit for major United States corporations at colleges and universities. Unfortunately, the literature revealed little

information on what is the training recruiters are receiving from corporations. Yet, there is a significant number of studies examining the recruiting process. This recruitment process is known as "selection interviewing", a technique most widely used by recruiters to screen college applicants. Because of the number of studies done on the recruiting process, this review will direct attention to them. This attention will focus upon the researchers' recommendation that a more comprehensive training program should exist for recuiters. In addition to these studies, the literature review will address: (a) what some corporations are doing to train their recruiters, and, (b) the training methods employed by trainers. The first issue examined will be the studies conducted by researchers on the recruiting process.

In Managing Human Assets Beer et al (1984), "Managing Human Rsource Flow", stated there are criteria for judging effective recruiting. Effective recruitment is the process that provides the organization with people who have the talents needed to achieve strategic goals. Recruitment has a significant impact on long range employment stability and turnover. It is known that a major reason for turnovers are employees' unmet expectations about a job. This problem lies with the recruiter who is telling only the postiive side of the company and glossing over the company's bad side.

Recruiters do not help candidates assess realistically their personal goals and skills in connection to the organization. A more open process of communicating organizational realities would attract perspectives who want to work for the company knowing the pros and cons. These fully informed candidates would more likely choose to adapt themselves to the organization. Within this chapter, "Managing Human Resource Flow", the authors present studies which show that when little information is known about a company, applicants make their decision about a job based on the warmth and thoughtfulness of a recruiter. Recruiter style has much to do with the applicant's decision especially in the case when an applicant knows little about the job or has little work experience. To guard against this misunderstanding, some companies have found that training line managers to conduct recruiting interviews can improve the effectiveness of recruitment. The improvement witnessed is reasoned to believe that line managers are more familiar with the company and with the specific qualifications needed for a job.

In their study, "Recruiter and Job Influences on Candidates for Employment", Sara L. Rynes and Howard E. Miller (1983) examined an interesting phenomenon: applicants interpret the recruiter's behavior as a signal regarding their choices of employment. Because applicants might interpret

recruiter's behavior in this way, it is important to pay particular attention to campus recruiting. It is here college applicants generally select the organizations they have become interested in or attacted to during interviewing. However, rather than state a conclusion Rynes and Miller make it clear that additional research is needed in this area.

Thomas J. Harn and George C. Thorton III (1985) conducted a study titled "Recruiter Counselling Behaviors and Applicant Impressions". This study supported this position: that to the extent the applicant perceived the recruiter to be a representative of a company, the recruiter's counseling behaviors had an effect on the decision of the applicant to accept the job. Based on this, the researchers concluded:

1. training college recruiters in counseling skills may improve the probability that the applicants such trained recruiters interviewed will accept the job;
2. increasing counseling behavior would possibly elicit more accurate information from applicants as well as reduce defensiveness; and,
3. training in basic listening skills would be an additional benefit.

There was a broad spectrum of studies conducted to determine the factors that influence recruiters' applicant selection. Edward A. Shaw, (1972)

"Commonality of Applicant Stereotypes Among Recruiters", conducted a study to test the hypothesis that recruiters from similar organizational backgrounds seek the same type of "good" applicant. Additionally, recruiters share the same definition of what is a "good" candidate, often looking for the candidates who are similar to themselves. It is believed if recruiters tend to hire people in their own image this can promote a boss-subordinate relationship. This type of relationship, the author asserted, is not a result of effective recruiting. (Beer et al, 1984) Unfortunately, Shaw was unabled to make a conclusive statement about the study due to the difficulty to interpret the results of the data. Notwithstanding, Shaw concluded that the definition of a "good applicant" was not necessarily "common knowledge" for all recruiters from the same type of organizations but recruiters from industrial organizations often look for the same qualifications and experiences.

Robert L. Dipboye and Jack W. Wiley, (1977) "Reactions of College Recruiters to Interviewer Sex and Self-presentation Style" was conducted to investigate whether a female will be rated lower than a male if both presented themselves in a passive manner or in an aggressive manner. The results indicated sex was not a factor. Recruiters ranked an applicant high according to his/her aggressiveness, likeability, qualifications

and answers. The major determinants in which the recruiters used to judge an applicant were (a) applicants' resumes (b) applicants'work experience/training, in addition to (c) recruiters' decision to to invite for a second interview and (d) decision to hire. The results indicated recruiters rated male and/or female applicants with moderatedly aggressive behavior high and rated passive behavior low for both sex. Based on the findings, Dipboye and Wiley deduced that gender based decisions are not a problem. This information is contrary to Simas and McCarry & Kinicki and Lockwood. Kathleen Simas and Michael McCarrey's (1979) research titled,"Impact of Recruiter Authoritarianism and Applicant Sex on Evaluation and Selection Decisions in a Recruitment Interview Analogue Study" evaluated the rate of authoritarianism in recruiter's judgements of male and female candidates for jobs. Their results suggested that highly authoritarian type recruiters, female or male, tend to favor male job applicants. Males were ranked higher than females, resulting in more job offers being made to males than females.

This difference found between the work of Dipboye and Wiley and that of Simas and McCarry suggest an issue here to be raised. The issue is that there are subjective factors influencing recruiters' decisions to hire an applicant is noted. Angels J. Kinicki and Chris

A. Lockwood (1985) in their study titled, "The Interview Process: An Examination of Factors Recruiters Use in Evaluating Job Applicants", investigated the factors that predict a recruiter's evaluation of an applicant's suitability for hire. The researchers found recruiters/interviewers trust impressionistic rather than concrete information for hiring and/or employment recommendations. Kinicki and Lockwood stated recruiters rely on interview impressions and attractiveness. The researchers concluded recruiters judge an applicant using subjective criteria for hiring. Using subjective ctiteria is prone to a rater's errors, e.g., halo, contrast effects. The researchers maintained that since recruiters rely on impressionistic rather than concrete information, organizations need to examine this extensively in conjunction with setting up a training program that will train and monitor all recruiters in hopes of limiting rater's error.

Wexley et al (1973) affirmed that studies conducted in the early seventies have shown interviewers were greatly influenced by rater's error, namely the contrast effect. (Corlson, 1970; Hakel, Ohnesorge & Dunnette, 1970; Leonard & Hakel, 1971) Contrast effect occurs when the interviewer's ratings are based on the calibers of those previously interviewed rather than on the quality of the applilcant's response. For that reason, it was necessary to find ways to reduce this rating

error.

The studies cited above warrant a caution to business organizations regarding their training and development programs. These studies caution that recruiters/interviewers give more consideration to the perceptional aspects of the interview, e.g., they are less objective when selecting the college applicants for employment. Moreover, it is important to note that although the use of selection interview is widespread, the validity of the interview procedure as a prediction of an applicant's job success is questionable.

Training for Recruiters

The use of interviewing has been utilized by the recruiters for years. The caution regarding the validity of the interviewing process has been noted. One must keep in mind that all corporations are concerned with the selection of qualified candidates who will work at their company. The most universally used method to identify qualified applicants is selection interviewing. The fact remains that today recruiters still trust this technique for employment decisions in the hiring or rejecting of college applicants. Nonetheless, as George E. Stevens (1981) states, "little attention is devoted to the training of interviewers, and firms seldom specify the objectives of the interview

processs" (p. 44). Stevens maintains how important it is for the recruiter/interviewer to be able to correctly identify those applicants who will be successful or unsuccessful on the job. Stevens believes one way to assure that recruiters have the abilities to successfully identify applicants is interview training. Training and practice can help reduce or eliminate many a rater's errors. Stevens suggests videotaped and/or tape recorded employment interviews be used and recommends them as two effective training methods for improving interviewing skills. Stevens surmised that good interviewing skills are acquired from systematic training and actual experience in conducting interviews.

Many individuals from the training and college placement fields have taken notice of these studies and have begun to identify ways to rectify subjectivity and rater's error in the selection of college applicants. College placement associations came into existence in order to develop professionalism within the college placement offices and their recruiting function. Their goal was to better prepare college recruiters to fulfill their vital function in the selection and career planning of college graduates. Like Stevens, it was believed some type of training for recruiters was necessary. Training was not only compulsory to increase interview effectiveness but also necessary to institute professionalism among the recruiting field.

Michael Devlin (1969) agreed that, in order to create professionalism in the recruiting field recruiters need training and college placement officers need similarly to be trained. He stated in "A New Concept in Recruiter Training" that this training cannot be superficial; it must be concentrated and done on an on-going bases. Devlin cited one association that had begun to establish professionalism within the recruiting field by providing on-going training to recruiters. In 1966, MAPA (Middle Atlantic Placement Association) had instituted a training workshop for corporate recruiters. The purpose of this workshop was to disseminate information to recruiters about the college recruiting process and to train them on effective interviewing skills. Devlin stated that although there were other associations that provided workshops for recruiters, he was of the opinion that the MAPA concept was different. It was different because of the following:

1. it was for college recruiters with less than two years experience;
2. there was a one day overlap with the placement director's In-Service Training Program;
3. every individual on the program was an active member of MAPA;
4. it was conducted on a college campus with excellent facilities available for group and individual participation; and,

5. there was total emphasis on 'nuts and bolts'.

(Devlin, 1969, p. 61)

The first day of the MAPA three day workshop consisted of a panel discussion where college placement directors discussed the function of placement officers and their expectations of the recruiters. The second day more discussions were held, e.g., the history of college recruiting, what makes a good recruiter and recruiting the minority student. An informal question and answer session was held after each discussion. On the final day, a presentation was given on developing good interviewing skills. Tapes were shown of good and bad interviewing. Recruiters critiqued each tape after they were shown. At the close of the workshop, each participant evaluated the workshop. One questionnaire's question asked whether the methods of presentation were effective. Recruiters suggested more time allotted for "open" discussion and more practice in interviewing skills and techniques.

The establishment of associations designed to further the professionalism of recruiters had begun and, at the same time, the implementation of sound systematic training programs within corporations have originated. In spite of what is being done, the literature documents little information on what type of training programs exists for recruiters. Roy W. Walters (1985) states that little information is known about what training is

received by recruiters because only a small portion of recruiters are being trained. In his articles, "It's Time We Become Pros", Walters believes corporations are using the same recruiting procedure to identify perspective candidates as they did thirty-five years ago. He states four reasons why:

1. corporations believe almost anyone can recruit perspective candidates;
2. corporations believe there is an abundant of talent out there so a lot of work is not needed to identify them;
3. most corporations do not place a high value on recruiting; and,
4. corporations link recruiting with inflation which results in "stop and go" recruiting.

Walters declares that his research indicates that less than 20 percent of recruiters are trained to do interviewing. Because of this, corporations should not make assumptions about the skills of a recruiter. Walters suggests recruiters should have a minimum of one week training which would entail live practice interviews which are critiqued. Walters believes corporations should have full-time recruiters who are professionally trained not part-time people from line or staff operations. Walters concludes that if corporations professionalize the recruiting functions, assess personnel needs, and determine manpower planning

then there is hope for a change in recruitment.

Workshops and training programs established by corporations to professionalize the recruiting function have been witnessed. Articles by Wexley, Jasper, Tepper, Crofts, Hough et al, and Privett will describe workshops/training programs that have been designed for recruiters plus what training methods are utilized to train them.

Wexley et al (1973) discuss in their article, "Training Interviewers to Eliminate contrast Effects in Employment interviews", three experiments which attempt to substantially reduce contrast effect in interviewing rating. The first experiment determined whether contrast effect could be reduced by warning interviewers about it. A videotaped interview of a hypothetical job applicant for a sales position was shown. The results showed that even though the subjects were warned, the warning had little impact on reducing contrast effect in their ratings. Based on this experiment, the researchers concluded that even when subjects are warned to avoid contrast effects their judgement about a candidate still fell victim to this rating error.

The second experiment had subjects rank the interview on a 9 point scale, a high suitability candidate (9) and a low suitability candidate (1). A videotape was shown. The results indicated this was not effective in reducing contrast effect.

The third experiment consisted of warning the subject about contrast effects as well as explaining how leniency, halo effect, central tendency, contrast effect and sterotyping can distort a judge when judging a beauty contest. In addition to the warning, the subject used the rating of a high suitable candidate, a low suitble candidate and the average suitable candidate. Again, this still proved to be unsuccessful in reducing contrast effect.

Based upon the results from the three experiments, the researchers, Wexley et al, developed a two hour workshop. This workshop had as a goal the determination of whether trained interviewers were less susceptible to contrast effect and thus be more effective.

Four training sessions were held with five subjects in each. Handouts, given to each subject, described a job and correspondingly, listed needed qualifications. Later, a discussion was held about it. Then three videotaped employment interviews were shown. The subjects were then asked to rate each applicant on a 9 point rating scale and to discuss why they did so. Different rating errors were brought to their attention and the correct ratings were given. The results of the training indicated contrast effect was reduced. The researchers came to the decision that only when intensive training takes into account different learning styles can learning take place among most learners.

Because handouts, small discussion groups, feedback, and videotapes were used as methods, this accounted for the effectiveness of the training. The researchers were unable to determine what methods were more effective but they affirmed that a training workshop of this type is practical and inexpensive for training employment interviewers.

William Jasper (1970) stated that the training received by new recruiters had little resemblance to what they were actually doing when recruiting. "Rarely do recruiters feel a gut reaction or go through any experience that approaches what might be encountered in a real life recruiting situation" (Jasper, 1970). Jasper provided a brief description of the training programs offered by universities in the state of California that attempted to give recruiters an experience in real life recruiting. These universities introduced as much realism as possible in their training program for college recruiters by designing two simulated college placement offices. The placement offices were staffed by actual placement officers. Five training sessions were developed to:

1. give an orientation on college recruiting;
2. give on site visits to college campuses where recruiting will take place;
3. provide role-playing experiences on interviewing;
4. provide feedback on interviewing skills; and

5. assess the training program.

The recruiters rated the training as beneficial and felt they gained knowledge of recruiting. They especially benefitted from the interaction between the participants. Secondly, the recruiters believed their involvement in the simulations created a lasting learning experience.

More training programs have recognized the need to provide practical experience for recruiters particularly in developing interviewing skills. Rita Tepper (1981) states in her article, "The Importance of Instructing Interviewers", companies must keep in mind the great pain career services take to prepare college candidates for interviews. Therefore, companies should also take great pain to train their recruiters on how to select candidates for positions available at their company. One organization to do this was a New Jersey Hospital. Tepper described the career planning and placement service at Ramapo College which offered workshops on interviewing skills tailored for recruiters recruiting for a New Jersey hospital. The recruiters assessed their present skills, needs and experiences. Based on their assessments, a ten hour course was developed to address recruiters/trainees deficiencies. This course included lectures and worksheets designed to develop interviewing skills specifically for managers and supervisors. The training methods utilized were

discussion, small group interaction, videotaped role plays of mock interviews, and practice sessions in interviewing. Tepper concluded that the ten hour training course demonstrated that adequate training was necessary and can be conducted in a relatively short time.

P. Crofts (1985) too believes companies should train their recruiters to be effective interviewers. In his article, "Who Trains Recruiters", Crofts states that line managers are the ones most often doing the recruiting. Because of their position and years of experience, companies assume managers know what its looking for therefore managers know how to select a candidate. As a result, companies fail to see the need to train people who recruit for their organizations. Crofts advocacy for recruiter training is supported in his article. He cites comments by different lecturers on recruitment training and workshops specifically design to give recruiters practical experience. One in particular is David Stenhanse. Stenhanse states it is not fair to a job candidate if the interviewer is learning interviewing skills on the job. He believes recruiters should have some practical experience in interviewing and this skill should be assessed continuously. Stenhanse suggests a closed-circuit television would be very beneficial. Here the interviewer would be placed in a simulated experience.

The video is played back for reactions, comments and discussion. The interviewer can make an assessment of his/her interviewing skills. Although this maybe one effective method of teaching interviewing skills, often interviewing skills are presented "to portray the process as far more rational and systematic than it ever is or perhaps can be" (Crofts, 1985, p. 49).

Crofts also cites two workshops directed by Brian Woodrow and Angelo Chris. Woodrow's workshop, Selection and Advertising, is designed to give an insight on different methods of recruitment. A highlight of the workshop is a trip to a national newspaper to see recruitment advertisments going into print. Angelo Chris, personnel manager of Paterson Candy International, states their two day training includes a formal course on interviewing skills as well as observing actual interviews between an applicant and recruiter. After observation, a debriefing session is conducted.

Designing a training program with emphasis on practical experience for recruiters is considered one best way to prepare recruiters with good interviewing skills and to insure effective recruiting.
Hough et al, and B. Gail Privett each describes a corporate training program for recruiters in their article which featured practical experience.
Hough et al (1981) in "Teaming Up for Recruiter

Training" cite Exxon's recruiter training program. Their training entails forming a recruiting team in which each team is required to participate in recruiter training prior to each recruiting season. The training is designed to address each recruiter's level of experience in the coordinated recruiting program. Each session reviews:

1. company employment strategies,
2. interview preparation,
3. interview format and questioning techniques,
4. Equal Employment Opportunity considerations and
5. job opportunities.

Exxon also deemed it necessary to take recruiting trips to Rutgers University which acquainted new recruiters with the resources, environments and people recruiters will be involved in during their campus recruiting experience. These trips were designed with the objective to:

1. give recruiters the opportunity to interview college applicants;
2. allow director of placement to talk to recruiters about the role of the placement office;
3. provide feedback from students as well as program trainer about the interview; and,
4. share ideas and viewpoints with recruiters about recruiting.

B. Gail Privett (1986) in her article, "Four Steps

to Recruiting Success" cited how successful Electronic Data Systems was in hiring 16,000 employees within 12 months. Privett stated the company's success was due to the effective recruiting efforts by their recruiters. She adds however, the success to recruit 16,000 qualified candidates was a result of the effective training received by the recruiters. Each recruiter was required to attend a one week intense training. The sessions made use of lectures, panel discussions and role plays. Each session discussed:

1. company orientation,
2. introduction to data processing,
3. Equal Employment Opportunity guidelines,
4. sourcing,
5. interviewing techniques,
6 employee profiles, interview cycles, and account tours.

Conclusion

This concludes the literature review on training for recruiters. Unfortunately, the literature does not offer much on what corporations are doing to train their recruiters. In fact, the review of the literature reveals gaps in knowledge about their training and various training methods employed. In spite of this shortcoming, a significant number of studies conducted

on the recruiting process does exist in the literature. It seems apparent that these studies underscore the need for more careful research to evaluate what is of value in determining effective recruiting. In addition, it seems evident that these studies highlight a need for a comprehensive training program for recruiters, directing attention to corporations who recruit on college campuses. Although many attempts have been made by corporations and college placement associations to train recruiters, the persistent attitude by corporations that "anyone can do recruiting" prevents a full fledge training effort by major corporations. This is unfortunate.

In any event, training of recruiters is needed. The studies clearly point out that interview training is most crucial to recruiters. However, these studies were unsuccessful in giving direct feedback to training programs which would recommmend methods to employ when training recruiters in interviewing skills. Based on the information from the training cited in the literature review, the use of lectures and discussions (with heavy emphasis on practical experience) appear to be most utilized when training recruiters. This does not say these are the most effective methods. What it does say is that, trainers have had the most success among methods employed with these two methods in developing interviewing skills. Trainers are utilizing

methods which they believe will develop knowledge, skills, and attitudes most effectively. Yet, to the extent of their effectiveness, more research is needed. William McGehee (1967) states, "Whether we are willing to admit it or not, the experiences to which we expose our employees are those which we believe and/or can convince management to believe will expedite the learning process" (p. 168). This statement by McGehee seems to be the case with most corporate trainers. Trainers appear to be designing and implementing training programs for recruiters without acknowledging the principles of adult learning brought forth through the adult education field by adult educators/theorists - Lindeman, Knowles, Skinner, Tough, Kolb, Mezirow and others. These adult educators have provided trainers with an understanding about the adult learner.

Based on the research of these adult educators, a curriculum has been constructed and methods have been generated that complement the learning needs of adults. Yet, there is not a full fledged effort on the part of training managers and trainers to embody these principles in corporate training programs. One must not forget the recruiters' roles in all of this. College campuses provide an abundance of talent for recruiters to select qualified candidates. Recruiters are recommending for employment applicants with sixteen or more years of education. It is safe to say that

education plays a major role in these prospective employees' lives. It has already been witnessed that as more and more "educated" employees have been hired by corporations they have made demands for continuing education thus making corporations the largest delivery system for adult education. Corporations are training many employees. Employees with sixteen or more years of education are learning with a basis composed of (a) an already established style of learning; (b) a background marked by teaching styles of their teachers/professors and academic discipline; (c) an educational experience made up of subjects learned and (d) modern technology. Additionally, these employees are coming from higher educational institutions where many of these leading adult educators' principles are the foundation upon which curricula are built and subjects are taught. Consequently, employees will expect training programs to offer the same types of teaching which they have become accustomed to and that will address their learning needs as employees/adult learners.

The lack of attention by training managers and trainers to the existing body of knowledge on how adults learn has "short changed" some employees. Perhaps the most central group which has been "short changed" is composed of recruiters, recruiters who received training or in some case not received training by their corporate training departments. Recruiters play a crucial role in

the success of a company and the success of a training program. Recruiters, serve as corporate "admission officers", determines to a large extent who works for a company and who are the adult learners that will benefit from the adult education services a corporation provides. As stated above, little attention appears to be directed towards the training of recruiters. Training managers and trainers are not acquainting themselves with the literature on the recruiter, the recruiting process and how best to train the recruiter. It is the duty of the training managers to inform their corporations about the lack of attention given to recruiters thereby recommending training to address recruiters' training needs. This may not be an easy task, but corporations must realize that their future destinies lie within the hands of recruiters selecting competent employees. It is a well trained and competent employee that will help make a successful company. Having a well trained and competent recruiting staff will ensure that recruiters can identify those applicants who will contribute to that success.

Training managers have a "job" ahead of them. First, training managers and trainers must examine the body of knowledge on adult learning and incorporate those principles that best suit their adult learners. Secondly, the training manager must recognize there is a body of adult learners, the recruiters, who are crucial

to the corporation but, who are not fully benefitting from the adult education services they need. Once training managers realize the important role recruiters play in making a company successful, they must convince top management to support the strengthening of the recruiter's role. Finally, training managers must establish "laboratories" within their training classroom to determine successful training practices for recruiters. By doing this, trainers can build upon the principles of adult learning and provide reliable data that possibly would establish an adult learning theory. With the recruiters in mind, trainers can contribute to the sparse literature on recruiter training. Training managers can offer the guiding principles to train recruiters. They can create the methodology by which the trainers will be trained and according to which the trainees themselves may successfully use in their recruiting. This is a process that will take time to construct and put in place.

As it is the case with any training offered to employees in corporations; money, time and personnel play a significant role in who receives training as well as what training methods are utilized. What trainers must remember when training recruiters or any other employees are the training objectives and how best the objectives can be carried out. Also, training managers must conduct an evaluation of the training workshops.

It will be the information provided that not only the value of the course but also the strengths and weakness of the course's content and the methodology utilized will be determined.

CHAPTER III

METHODOLOGY

Method

Corporate training and development programs have increased in size, scope and the amount of money spent on employee training. As a result, they have turned into institutions of lifelong learning, becoming the largest delivery system for adult education. Although training has become an integral part for educating employees, there has been very little reliable data about the state of employee training in the United States. Specifically, there has been little data collected concerning training practices and training managers/trainers utilization of adult learning principles in the design and implementation of training. This state of affairs can be said to exist because training directors are unwilling to share what type of training activities are being employed in their training departments. This is unfortunate as noted by L. Olson (1986) who conducted a telephone survey to find out the training practices of twelve leading U.S. Corporations. Although corporations were unwilling to share information about their practices, what was learned from surveys such as this is that corporations are training a large number of adult learners. In additiion,

it is suggested that corporations are training these adults by principles of adult learning.

The adult learners that are subject of the present study are the recruiters. The study is specifically interested in the education and training directed towards and given to corporate recruiters. Recruiters are crucial to the future endeavors of their corporations since they control the nature of the target population. In other words, recruiters are in effect the admissions officers for the corporations. Therefore, it is important to know if recruiters are trained by sound principles of adult learning.

The literature reveals little documentation on the training received by recruiters sent to colleges and universities from U.S. Corporations. This study will therefore seek to determine: (a) what are the adult learning principles that underpin the training practices used by corporations to train their recruiters; (b) what kinds of training practices do recruiters find effective in their own training as recruiters; and, (c) the amount of training recruiters receive by their corporations. A questionnaire was used for the study because of its anonymity; it should uncover information about training practices that a telephone survey might not.

Subjects

The subjects for the study were selected based on the availability of a large sample population of recruiters representing large and small U.S. Corporations. The recruiters were to visit the campus of the University of Massachusetts in Amherst during the fall semester of 1987. Ninety-five corporations recruited during the fall recruiting cycle (October, November, December) at the University's Career Placement Center. These corporations were classified into eight corporation types: research, government, non-specific manufacturing, computer manufacturing, chemical manufacturing, consumer product manufacturing and retail. The sizes of the corporations range from: 150-640 (extra small); 1,000-8,400 (small); 10,000-35,000 (medium); 40,000-93,500 (medium large); and, 107,000-1,000,000 (large). Tables one, two, three, and four provide detailed descriptions of the sample population.

Instrument

The questionnaire (appendix A) was developed based on ten adult learning principles (appendix B), a consolidation of adult learning theories offered by six adult educators who were considered major contributors to

the adult education field. These theories and principles were discussed in detail in the previous chapter. Each principle was examined and listed according to the activities a corporate training program might employ to address each principle. A group of professional adult educators at the university assisted in this analysis. The process listed approximately five to six activities for each of the ten principles. Questions were then developed to address each adult learning activity (appendix C). In addition, twenty-four training methods and ten media resources were added to the questionnaire. These methods and resources were added because they were considered to be most frequently utilized in corporate training. (Laird, 1978) Additionally, demographic information (sex, age, and educational attainment) were asked. Since age, sex, and level of educational attainment are factors which influence adults' preference for learning methods, these are also important factors relative to the recruiters. (Berg and Poppenhagen, 1985; & Davenport and Davenport, 1985) The name and type of corporation was also elicited from the recruiters. The size of each corporation represented in the sample was determined by the corporation's directories. This was done in order to determine whether size of corporations was a factor in the utilization of adult learning principles. The final two questions asked were somewhat open ended in order to allow recruiters: (a) to list other

methods/activities not mentioned in the questionnaire that they believed were useful for training recruiters; and, (b) to provide information on the amount of training they had received. Question (b) was asked to support the literature that claimed little training is received by recruiters. (Walters, 1985; & Croft, 1985)

A copy of the questionnaire's first draft was given to the staff development director of the University of Massachusett/Amherst, a training manager and corporate trainer of an insurance company, and three statisticians for comments and suggestions. Following their responses, the questionnaire was revised and sent to six employees from three types of companies: (a) technical, (b) insurance, and (c) social service. Although these six employees were not recruiters per se, they had the responsibility of interviewing job applicants. They were asked to comment on: (a) the clarity of the questions; (b) the length of the questionnaire; and, (c) whether there was undue duplication. Based on their recommendations, the questionnaire was shortened. The revising process was completed by following suggestions of a statistician. Each principle was examined and pertinent questions were selected for each principle which would provide the information needed to address adult learning.

The final draft of the questionnaire asked the recruiters to respond to a series of twenty-three items. Items 1 through 4 sought demographic information: (a) age,

(b) sex, (c) education, and (d) name of organization and type of organization. Item 5 required a "yes" or "no" response for the types of workshops/seminars offered from the recruiters' training programs. Responses for items 6 through 19 were based on a 4 point Likert scale. Additionally, items 5 through 18 pertained to the utilization of adult learning principles in training. For the purpose of the investigation, a high score, e.g. 4 points, indicated high usage of adult learning principles, while a low score, e.g. 1 point, indicated a low usage of adult learning principles. Responses to items 19 through 21 were also based on a 4 point Likert scale. These questions related to the usefulness of training methods and media resources. Here, a high score indicated the usefulness of the methods and media resources and a low score indicated the lack of usefulness of a method or media resource. Another question sought information on the amount of training received by the recruiters. The last question requested information or suggestions the recruiters might have on training methods not mentioned in the questionnaire.

Procedure

The questionnaires were included in an information package provided to the recruiters on their arrival at the University Career Placement Office. During an

orientation, the career placement staff mentioned the questionnaire to the recruiters. The recruiters were to complete the questionnaire at the Career Placement Office. When completed, it was returned to the receptionist. If time did not permit, a stamped self addressed envelope was attached to the questionnaire for return. Questionnaires were collected from the career placement office. Because of the low return rate (15%) for the month of October and part of November, several strategies were considered and three were implemented.

(a) A second meeting was scheduled with professional staff to ask them to encourage the recruiters to complete the questionnaire since the professional staff greeted the recruiters in the morning.

(b) Small notes were attached to the remaining questionnaires, stressing the importance of completing questionnaires by noon.

(c) Follow-up phone calls were made to secure returns of the questionnaires.

The researcher quickly realized that more calls had to be made than not and that the return rate was still low. A three cycle return process was implemented. Before this process, the return rate was at 29.9%. A visit was made to the Career Placement Office. It was the procedure of their office for recruiters to sign in at the receptionist desk. The sign-in sheet had the corporations' names and addresses as well as the recruiters' names. By this time,

all the recruiters for October and November had made their visit. The sign-in sheet was used by the researcher to mail a personal letter requesting returns of their questionnaires. In addition, the letter asked the recruiters to fill out a follow-up questionnaire which was sent with the letter. The follow-up questionnaires went to the October recruiters. The recruiters who visited in November and December received a "just a reminder" note. The return rate had increased. For the recruiters who were sent a follow-up questionnaire, the researcher had a (10%) return rate. However, for the recruiters who were sent a "just a reminder" note, the return rate was low (5.1%). After the New Year, the researcher continued to send more follow-up questionnaires to the November and December recruiters. The return rate was (11.8%). During the second week of February, the researcher made follow-up phone calls to all recruiters who had made visits to the Career Placement Office but had not yet returned the questionnaires. The final return rate was (57.8%).

Design

The data were analyzed using the frequency count of the recruiter's responses to each question. Each response to the questions was analyzed. A score was attached to each variable with a high score indicating high utilization of adult learning principles while a low score

indicated low utilization of adult learning principles - ordinal level of variables. This was also done to determine the usefulness of the training methods and the media resources with a low score indicating least useful and a high score indicating very useful. Additionally, the data were analyzed to determine:

1. whether sex, age and education are factors in adults' preference for training methods;
2. whether size of the corporation is a factor in the utilization of adult learning principles in their training of recruiters;
3. whether the size or the type of corporation are factors in the training of recruiters; and,
4. whether there is a general set of responses common among the sexes, the age groups, the educational levels, and the types and sizes of the corporations.

Chi-square and Analysis of Variance were the two statistical tests used to analyze the data.

CHAPTER IV

ANALYSIS OF DATA

This study seeks to determine: (a) the adult learning principles utilized as a foundation in the design and implementation of corporate training for recruiters ; and, (b) the methods employed by corporate training departments that are perceived by recruiters as useful or least useful; and (c) the amount of training received by corporate recruiters. Questionnaires were placed in each recruiter's recruiting package which is received by them upon arrival at the Career Placement Office. The population included 194 recruiters, representing 95 corporations recruiting at the University of Massachusetts in Amherst between October and December. The larger companies, e.g., IBM, Proctor & Gamble, Digital, Raytheon and Pratt & Whitney sent six or more recruiters which explains the differences between the number of recruiters and the number of companies. (See table 1, p. 188-190)

In order to maximize return rate, (See table 2, p. 191) a three cycle return process was used which is described in the methodolgy chapter. Out of the 194 questionaires placed in the recruiters's package, the researcher received 112 answered questionnaires (57.8%), representing 73 out of 95 corporations (77%). There were 6 recruiters who responded but did not answer the

Table 1

1987 Fall Semester Recruiters' Roster

	Corporations	No. of Recruiters	No. of Recruiters
1.	Abitibi	2	2
2.	American Cyanimid	1	1
3.	Amoco	1	1
4.	Arco	1	1
5.	AT & T	4	2
6.	B. F. Goodrich	2	2
7.	Borg Warner	2	1
8.	Bureau of Labor Statistics	2	2
9.	Camp Dresser McKee	1	0
10.	Clairol	2	(1-)
11.	Clean Harbor	1	1
12.	Codex Corp.	2	1
13.	Combined Insurance	1	0
14.	Data General	1	1
15.	Dennison Environmental	1	0
16.	Dept. of Environmental Quality Engineering	2	2
17.	Digital	6	2 (2-)
18.	Dupont	2	1 (1-)
19.	Eastman Kodak	4	2
20.	E. C. Jordan	1	0
21.	Eveready Battery	1	1
22.	Electronic Data Systems	2	1
23.	Factory Mutual Engineering	1	1
24.	Fed. Bureau of Prisons	2	2
25.	Filene's Basement	2	2
26.	First Brand Corp.	3	2
27.	First Investor Corp.	2	1
28.	Footlocker	2	2
29.	General Dynamic Data System	4	2
30.	General Electric	11	5
31.	General Foods	1	0
32.	GTE	2	2
33.	Hercules	1	1
34.	Hit or Miss	1	0
35.	Hughes Aircraft	2	1
36.	IBM	19	6 (-1)*
37.	Intermetric	1	1
38.	James River Graphics	2	1
39.	Jordan Marsh	1	1
40.	Kay Jeweler	1	0
41.	Lawrence Livermore	1	1
42.	Lechmere	1	0
43.	Lord Corp.	1	0
44.	Metcalf & Eddy	1	1
45.	Mitre	2	1

*No +/- means responded but no questionnaire.

Continued on next page.

Table 1 (continued)

	Corporation	No. of Recruiters	No. of Recruiters
46.	Mobay	1	1
47.	Mobil Chemical	1	1
48.	Morgan Stanley	1	0
49.	National Security Agency	1	0
50.	Naval Weapon	1	1
51.	New England Electric	3	0
52.	Nichols Research	1	1
53.	Norfolk Naval Shipyard	2	2
54.	NYNEX/NET	2	1
55.	Olin	1	1
56.	Personal Cad System	1	1
57.	Polaroid	2	1
58.	Prime Computer	2	2
59.	Proctor & Gamble	6	5
60.	Radant Technology	1	0
61.	Raytheon	7	4
62.	Rohm & Haas	1	1
63.	Rome Air Ser. Griffiss AFB	2	0
64.	Sanders Assoc.	3	3
65.	SEA Consultants	2	0
66.	Sigma Circuits	2	1
67.	Square D	2	2
68.	Stone & Webster	2	1
69.	Teradyne	2	1
70.	T. J. Maxx	1	0
71.	Torrington Co.	1	0
72.	Union Comp.	1	1
73.	United Consumer Club	1	1
74.	U.S. Dept. of Energy	1	0
75.	U.S. Dept. of Labor	1	0
76.	USG Corp.	1	0
77.	U.S. Naval Underwater	1	1
78.	U.S. Patent & Trademark	1	1
79.	Viewlogic	2	(1-)*
80.	Vista Chemical	1	1
81.	Wang Labs	4	2
82.	Westvaco	1	0
83.	American Int'l. Adj. Co.	1	0
84.	ICI Americas	2	1
85.	Lever Bros.	1	1
86.	MIT Lincoln Lab	1	1
87.	Northrop Corp.	2	1
88.	Otis Elevator	1	1
89.	Pratt & Whitney	6	5
90.	Hamilton Standard	2	1
91.	U.S. Air Force 485 Eng.	1	1

*No +/- means responded but no questionnaire.

Continued on next page.

Table 1 (continued)

	Corporation	No. of Recruiters	No. of Recruiters
92.	U.S. Navy Civilian	2	2
93.	United Tech-Sikorsky	1	1
94.	Unknown	?	1
95.	Unknown	?	1
No. of companies represented:	75 = %	194	112 = %

*No +/- means responded but no questionnaire.

Table 2

Three Cycle Process

Placed in Recruiters Package	Responded	% Returned	Cum Freq
Oct-Nov-Dec 194	58	29.9	28.9
October follow-up questionnaires 43	19	10	39.9
Nov-Dec follow-up "Just a Reminder" 66	10	5.1	45
Nov-Dec follow-up questionnaires 56	23	11.8	56.8
Follow-up letters to companies not represented 22	2	1	57.8

questionnaire because of:

1. legal restrictions;
2. recruiter did not receive any training;
3. the company was small, therefore it does not have a training department;
4. recruiter was not interested in filling out the survey; or,
5. company policy.

The recruiters' responses to items 1-4 provide demographic information about the research sample. Of those providing valid responses, the age ranges were set of 21-25 (9%), 26-34 (41%),35-44 (27%), and 45+ (23%) (See table 3a, p. 193). Of those responding, twenty-three (20.5%) were female and eighty-nine (79.5)% were male (See table 3b, p. 193). Within the sample population, there is a limited diversity with regards to educational attainment. Sixty-two had four year college degrees (57.9%) and forty five had graduate level (42.1%)training.

Of the corporations represented, there were a wide variety of types. Table 4a (p. 194) identifies the relative frequency of the various corporations. Nonspecific manufacturing (43), government (17), and computer manufacturing (15) were the most frequently represented corporation types. The sizes of the 73 corporations were determined by consulting The Million Dollar Directory, Standard and Poors Register of Corporations and the Career Placement Office Library.

Table 3a

RECRUITERS' AGE

	21-25	26-34	35-44	45+	X	SD
NO	10	46	30	22	2.631	.933
%	9	41	27	23		

Table 3b

RECRUITERS' SEX

	F	M	X	SD
NO	23	89	1.795	.406
%	20	80		

Table 4a

Types of Corporation

	Type	No	%	X	SD
1.	Research	8	7	5.446	9.313
2.	Communication	4	4		
3.	Government	17	15		
4.	Non-specific manufacturing	43	38		
5.	Chemical manuf.	13	12		
6.	Computer manuf.	15	13		
7.	Consumer product manufacturing	6	5		
8.	Retail	5	5		
	Unknown	1	.9		

However, not all corporation sizes were available from these three sources, resulting in 28 missing. Table 4b (p. 196) shows the size breakdown.

Items 5-18 questioned corporate training activities regarding a variety of workshop/seminars and training practices. The content of these individual seminars or training practices reflect utilization of adult learning principles. Table 5a-d (p. 197-200) identifies frequency of responses to the utilization of these principles. The number in parenthesis will indicate the adult learning principle. A relationship of the training activities and/or practices between the adult learning principles will be further discussed in analysis of hypotheses four. Item 5a-k required the respondents to circle yes or no. Items 6-22 utilized a 4 point Likert Scale. A numerical value was attached to each variable, (4) being the highest and (1) being the lowest possible score. "Don't knows" responses were not calculated. A frequency count was used to obtain the highest percentage for each item. The mean score and standard deviation is given.

Items 19-21 questioned corporate training methodology. Twenty-four methods and ten media resources were surveyed to determine how often they were employed by recruiters' training departments as well as how useful the recruiters perceived these methods to be. A frequency count was used to obtain the highest percentage for each method and media resource. The mean score and standard deviation are

Table 4b

Sizes of Corporations

Sizes	no	%
Extra small (150-640)	6	7
Small (1.000-8.000)	27	32
Medium (10.000-35.000)	21	25
Medium large (40.000-93.500)	11	13
Large (107.000-1.000.000)	19	23

Table 5a

% of Responses to Item 5

	Yes	No	Missing	X	SD	Principle
career development	76	24	0	1.24	.43	(1)
child care	8	86	6	1.91	.43	(1)
budgeting your money	30	65	5	1.68	.46	(1)
how to fix/work	40	48	12	1.54	.50	(1)
aging/death	11	80	9	1.88	.32	(1)
job specify training	87	10	4	1.10	.30	(1)
health/fitness	54	44	3	1.45	.50	(1)
retirement/pension company policies operations	87	11	3	1.1	.31	(1)
academic courses technology oriented training	73	23	4	1.2	.43	(1)

Table 5b

% of Responses to Item 6-11

	A	S	R	N	DK	M	X	SD	Prin.
assessment of employees' present job skills	39	22	6	17	14	9	2.98	1.16	(1)
opportunities for individual choice in learning experience	40	35	9	6	8	2	3.20	.88	(3)
train employees skills in self-assessment	40	28	14	13	11	9	2.93	1.05	(3)
range of teaching styles	37	41	6	7	8	9	3.17	3.17	(5)
conscious raising techniques	21	34	10	13	17	6	2.79	1.02	(10)
assess prior learning	22	30	17	16	14	9	2.68	1.06	(6)
assess past working experiences	21	31	15	14	17	9	2.72	1.03	(6)

A = Always
S = Sometimes
R = Rarely
N = Never
DK = Don't Know
M = Missing Information

Table 5c

% of Responses to Item 12a-h

	VO	O	S	R	DK	M	X	SD	Prin.
opportunities to share personal experiences	13	24	25	26	9	4	2.28	1.05	(1)
opportunities to reflect on learning experiences	12	33	26	17	9	4	2.44	.95	(1)
organize support groups to solve problems	13	26	28	20	12	3	2.36	.99	(7)
one-on-one relationship with trainer	17	25	25	21	11	2	2.43	1.05	(7)
develops skills in problem solving	25	34	27	7	5	3	2.82	.91	(7)
learning options and flexibility	22	21	26	20	8	3	2.52	1.09	(6)
educational and career life goals are discussed	13	33	22	25	6	9	2.35	1.02	(1)
select problems that deals with real life	17	34	27	14	6	2	2.58	.96	(7)

VO = Very Often
O = Often
S = Sometimes
R = Rarely
DK = Don't Know
M = Missing Information

Table 5d

% of Responses to Item 13-18

	G	C	S	L	DK	M	X	SD	Prin.
pose question to what you want to know	13	24	37	15	10	2	2.61	.93	(2)
employees outline their plan of learning action	13	29	30	18	8	2	2.41	.97	(6)
employees evaluate own progress	15	33	27	15	7	3	2.53	.96	(6)
offer activities based on employees' previous experience	10	24	34	16	13	4	2.33	.92	(3)
employee direct their own learning	13	23	36	14	13	9	2.39	.93	(6)
trainer adopts role of resource person	10	29	32	9	15	5	2.49	.85	(6)
learner controls pace of the learning	10	36	30	15	6	4	2.44	.90	(8)
employee/trainer diagnose learning need	9	24	31	21	10	5	2.25	.94	(9)
learning outcomes evaluated	13	30	26	16	10	5	2.4	.97	(9)

G = Great
C - Considerable
S = Some
L = Little
DK = Don't Know
M = Missing

given. (See table 6,7; p. 202-203)

Item 22 investigated the amount of training received by recruiters. A frequency count was computed to obtain the highest percentage. Respondents said corporations do a "considerable" amount of training (31%). The mean score (2.69) with a standard deviation (1.46) was computed. (See table 8, p. 204) In hypotheses five and six, a further discussion will continue about the amount of training and its relationship to size and types of corporations.

Item 23 permitted respondents to provide any additional information not asked by the researcher. Twelve recruiters (11.4%) responded.

Data collected from this survey is reported in tabular and narrative form. Hypotheses one through six were statistically tested using the chi-square test and analysis of variance where applicable. Chi-square tests of significance were rejected at the .05 level of significance. The final paragraph for each hypothesis gives a summary and analysis of the findings.

Hypthesis 1

There is a significant difference between males and females in their preference for training methodology. (Females preference for training methods are different from males)

Female and male's responses are presented in a

Table 6

% of Responses to Methods Being Employed
by the 73 Corporations

	G	C	S	L	DK	M	X	SD	VC/R
learning contract	5	11	10	21	47	5	2.0	1.07	53/112
individualized learning	16	25	25	18	13	4	2.4	1.03	94/112
reflective exercises	7	16	28	17	29	4	2.1	.93	76/112
hypothetical exercises	6	21	41	12	18	3	2.2	.80	89/112
simulation	9	31	30	10	14	5	2.4	.85	90/112
case studies	13	34	30	9	10	4	2.5	.87	97/112
video disk cassettes	27	38	24	5	5	2	2.9	.86	104/112
lecture	27	47	13	8	4	2	2.9	.87	106/112
television	8	23	25	28	11	5	2.1	.99	94/112
discussion	30	46	12	5	5	3	3.0	.82	104/112
t-groups	5	7	17	13	52	6	2.06	.96	47/112
internships/apprenticeship	9	15	27	35	11	4	1.97	1.00	96/112
computer	20	30	21	13	12	5	2.67	1.01	94/112
games	3	11	23	38	21	5	1.71	.84	83/112
roleplays	12	38	21	13	11	5	2.56	.91	95/112
brainstorming	19	32	24	11	8	6	2.68	.95	96/112
demonstration	18	36	28	5	7	6	2.75	.85	97/112
field trips	2	10	24	46	12	7	1.60	.78	91/112
note-taking	12	32	29	15	7	5	2.45	.93	98/112
question/answer session	17	35	24	11	6	7	2.67	.93	97/112
reading	15	38	29	7	5	5	2.69	.84	100/112
fishbowl	2	5	13	14	55	11	1.84	.87	39/112
sm. group work	10	40	29	10	5	6	2.56	.83	99/112

G = Great
C = Considerable
S = Some
L = Little
DK = Don't Know

M = Missing
VC/r = $\frac{\text{Valid Cases}}{\text{\# of Total Responses}}$

Table 7

% of Responses to the Degree of Effectiveness of Methods and Media Resources

	V	Q	S	N	DK	M	X	SD	VC/R
lecture	9	43	38	3	2	6	2.63	.70	103/112
discussion	26	46	17	9	2	8	3.07	.71	101/112
case studies	21	38	21	5	8	8	2.88	.84	94/112
sm. group work	30	40	17	9	5	7	3.13	.75	99/112
videodisk cassette	9	29	38	6	10	8	2.48	.79	92/112
individual instruc.	21	35	13	3	19	11	3.03	.79	79/112
computer instruc.	55	29	29	7	21	10	2.46	.78	78/112
simulation	12	29	30	44	18	9	2.65	.80	82/112
games	5	15	24	12	35	10	2.22	.87	62/112
internships/apprenticeship	18	14	19	7	30	12	2.73	1.03	65/112
reflective exercise	4	16	25	5	39	11	2.35	.77	56/112
demonstrations	15	39	23	44	10	9	2.81	.78	91/112
field trips	7	13	21	9	37	13	2.37	.94	56/112
hypothetical exercise	9	35	27	6	15	8	2.60	.80	86/112
television	5	15	35	11	25	10	2.20	.79	73/112
roleplays	14	43	20	9	5	9	2.72	.86	96/112
t-groups	5	6	18	5	54	13	2.32	.88	37/112
fishbowl	3	5	13	6	63	11	2.13	.90	30/112
brainstorming	18	31	30	3	12	6	2.78	.32	92/112
note-taking	5	29	44	10	7	6	2.32	.74	97/112
structured discussion	8	41	35	3	7	6	2.62	.69	97/112
panel discussion	5	36	29	7	17	6	2.51	.76	86/112
question/answer session	15	47	28	9	4	5	2.84	.70	102/112
reading	8	29	48	2	6	7	2.49	.69	97/112
overhead projector	17	54	18	3	4	6	2.92	.70	101/112
audio tape	7	21	38	19	7	7	2.19	.87	96/112
slide/sound presentation	16	43	27	5	4	6	2.78	.79	101/112
hand-outs	13	40	38	2	2	6	2.68	.73	103/112
35mm films	7	33	26	9	18	7	2.51	.82	84/112
newsprint	3	17	44	13	17	6	2.11	.72	86/112
chalkboard	7	38	38	6	5	6	2.51	.74	100/112
simulators	8	27	25	6	26	8	2.55	.83	74/112

V = Very Effective
Q = Quite Effective
S = Somewhat Effective
N = Not Effective

DK = Don't Know
M = Missing
VC/R = $\frac{\text{Valid Cases}}{\text{\# of Total Responses}}$

Table 8

% of Responses to Amount of Recruiter Training

	G	C	S	L	DK	M	X	SD	VC/R
NO	(14)	(35)	(26)	(19)	(4)	(14)	2.69	1.46	98/112
%	13	31	23	17	4	13			

G = Great
C = Considerable
S = Some
L = Little
DK = Don't Know
VC/R = $\frac{\text{Valid Cases}}{\text{\# of Total Responses}}$

frequency distribution table indicating the raw score and percentile response for their rating of twenty-four methods and ten media resources. Chi-square values were calculated for this relationship. A cross tabulation was done in order to determine which sexes perceive each method to be effective or ineffective. The responses were based on a 4 point Likert Scale: (4) very effective and (1) ineffective. "Don't know" responses and missing answers were labeled "missing" and not used in the calculations. Table nine (p. 206) shows results of Chi-square test for each of the twenty-four methods and ten media resources.

In examining the twenty-four methods to determine whether there is a significant difference in the relationship of preference for methods and sex, there were four methods where the significance level was .05 or less. The four are the following:

Lecture - The chi-square was computed as 9.853 with 3 degrees of freedom. The significance level is .0199. 81% females perceived lecture to be "very" to "quite" effective, giving lecture a positive rating. 19% females only gave it a negative rating. 50% Males perceived lecture to be "very" to "quite" effective as well as 50% rating it "somewhat" or "not" effective, giving lecture postive and negative ratings.

Videodisk cassette - The chi-square was computed as 9.910 with 3 degrees of freedom. The significance level

Table 9

Gender Preference for Methodology

		V	Q	S	N	X^2	df	SL	M
lecture	F	(5)24%	(12)57%	(4)19%	(0) 0%	9.853	3	.0199	9
	M	(5) 6%	(36)44%	(38)46%	(3) 4%				
discussion	F	(10)50%	(7)35%	(3)15%	(0) 0%	5.691	3	.1276	11
	M	(19)24%	(45)56%	(16)20%	(1) 1%				
case studies	F	(9)43%	(9)43%	(3)14%	(0) 0%	6.535	3	.0883	18
	M	(14)19%	(33)45%	(21)29%	(5) 7%				
sm. group work	F	(10)48%	(10)48%	(1) 5%	(0) 0%	4.556	3	.2073	13
	M	(24)31%	(35)45%	(18)23%	(1) 1%				
video disk cassette	F	(5)29%	(8)44%	(5)28%	(0) 0%	9.910	3	.0193	20
	M	(5) 7%	(24)32%	(38)51%	(7)10%				
individual instruction	F	(5)33%	(9)60%	(1) 7%	(0) 0%	2.517	3	.4722	33
	M	(18)28%	(30)47%	(13)20%	(3) 5%				
computer instruction	F	(3)18%	(7)41%	(6)35%	(1) 6%	3.380	3	.3367	34
	M	(3) 5%	(25)41%	(26)43%	(7)12%				
simulation	F	(5)39%	(4)31%	(3)23%	(1) 8%	6.632	3	.0846	30
	M	(8)12%	(28)41%	(30)44%	(3) 4%				
games	F	(2)14%	(5)36%	(4)29%	(3)21%	2.254	3	.5212	50
	M	(3) 6%	(12)25%	(23)48%	(10)21%				
internships/ apprenticeship	F	(8)53%	(4)27%	(2)13%	(1) 7%	5.937	3	.1147	47
	M	(12)24%	(12)24%	(19)38%	(7)14%				
reflective exercise	F	(2)14%	(5)36%	(7)50%	(0) 0%	3.407	3	.3330	56
	M	(2) 5%	(13)31%	(21)50%	(6)14%				
demonstrations	F	(5)20%	(10)56%	(2)11%	(1) 6%	3.697	3	.2960	21
	M	(12)16%	(34)47%	(24)33%	(3) 4%				
field trips	F	(3)25%	(2)17%	(5)42%	(2)17%	1.824	3	.6096	56
	M	(5)11%	(13)30%	(18)41%	(8)18%				
hypothetical	F	(4)20%	(11)55%	(5)25%	(0) 0%	4.957	3	.1750	26
	M	(6) 9%	(28)43%	(25)38%	(7)11%				
television	F	(3)19%	(4)25%	(6)38%	(3)19%	5.302	3	.1510	39
	M	(2) 4%	(13)23%	(33)58%	(9)16%				
roleplays	F	(5)24%	(14)67%	(2)10%	(0) 0%	7.220	3	.0652	16
	M	(11)15%	(34)45%	(20)27%	(10)13%				
t-groups	F	(3)38%	(2)25%	(3)38%	(0) 0%	6.441	3	.0920	75
	M	(2) 7%	(5)17%	(17)59%	(5)17%				
fishbowl	F	(1)11%	(4)44%	(4)44%	(0) 0%	9.047	3	.0287	82
	M	(2)10%	(1) 5%	(11)52%	(7)33%				
brainstorming	F	(5)26%	(10)53%	(4)21%	(0) 0%	3.989	3	.2626	20
	M	(15)21%	(25)34%	(30)41%	(3) 4%				

Continued on next page.

Table 9 (continued)

		V	Q	S	N	X^2	df	SL	M
note-taking	F	(3)16%	(8)42%	(7)37%	(1) 5%	7.423	3	.0596	15
	M	(2) 3%	(24)31%	(42)54%	(10)13%				
structured discussion	F	(4)20%	(7)45%	(9)45%	(0) 0%	4.864	3	.1820	15
	M	(5) 7%	(39)51%	(30)40%	(3) 4%				
panel discussion	F	(4)19%	(7)33%	(8)38%	(2)10%	6.847	3	.0769	26
	M	(2) 3%	(33)51%	(24)37%	(6) 9%				
question/ answer session	F	(5)24%	(9)43%	(7)33%	(0) 0%	1.565	3	.6672	10
	M	(12)15%	(44)54%	(24)30%	(1) 1%				
reading	F	(3)14%	(8)38%	(10)48%	(0) 0%	1.800	3	.6148	15
	M	(6) 8%	(24)32%	(44)58%	(2) 3%				
overhead projector	F	(4)20%	(13)65%	(3)15%	(0) 0%	1.228	3	.7461	11
	M	(14)17%	(47)58%	(17)21%	(3) 4%				
audio tape	F	(4)20%	(7)35%	(5)25%	(4)20%	7.386	3	.0605	16
	M	(4) 5%	(17)22%	(38)50%	(17)22%				
slide/sound presentation	F	(5)25%	(11)55%	(4)20%	(0) 0%	3.039	3	.3856	11
	M	(13)16%	(37)46%	(26)32%	(5) 6%				
handouts	F	(5)24%	(8)38%	(8)38%	(0) 0%	2.754	3	.4311	9
	M	(9)11%	(36)44%	(35)43%	(2) 2%				
35mm	F	(4)21%	(9)47%	(5)26%	(1) 5%	4.877	3	.1810	28
	M	(4) 6%	(28)43%	(24) 3%	(9)14%				
newsprint	F	(2)11%	(3)16%	(12)63%	(2)11%	4.733	3	.1924	26
	M	(1) 2%	(16)24%	(37)55%	(13)19%				
chalkboard	F	(1) 5%	(9)45%	(9)45%	(1) 5%	5.009	3	.9187	12
	M	(7) 9%	(33)41%	(34)43%	(6) 8%				
simulators	F	(2)14%	(6)43%	(5)36%	(1) 7%	.2054	3	.9767	38
	M	(7)12%	(24)40%	(23)38%	(6)10%				
models	F	(4)27%	(6)40%	(5)33%	(0) 0%	4.153	3	.2454	
	M	(6)10%	(37)60%	(17)27%	(2) 3%				
flannelboard	F	(1)13%	(1)13%	(5)63%	(1)13%	3.300	3	.3475	66
	M	(1) 3%	(15)40%	(17)45%	(5)13%				

is .0193. 72% females perceived this method as "quite" to "very" effective, giving videodisk cassette a favorable rating. Only 39% males found videodisk cassette "quite" to "very" effective. More (61%) males gave this method an unfavorable rating.

Fishbowl - The chi-square was computed as 9.047 with 3 degrees of freedom. The significance level is .0287. 55% females rated this method to be "quite" to "very" effective methods. 15% Males rated this methods only "quite" to "very" effective. 85% rated fishbowl "somewhat" to "not" effective, perceiving fishbowl to be less effective than females.

Notetaking - The chi-square was computed as 7.423 with 3 degrees of freeedom. The significance level is .05. 58% females rated this method "quite" to "very" effective whereas 33% male only perceived it "quite" to "very" effective. 67% males rated notetaking "somewhat" to "not" effective. Females perceived this method more positively than males.

For each of these four methods, it appears that in regards to this sample population a significant relationship exist between gender and the preference for methods. There are other methods where the significance levels were slightly greater than the .05 level. They are: (a) t-groups, (b) roleplaying, (c) case studies, and (d) panel discussion. However, the degree of relationship between gender and these four methods (ranging from .065 -

.095) demonstrate tendencies toward relationship. Under other conditions, e.g. a larger sample size or a larger sample of females, these methods may demonstrate qreater significance.

The results of the Chi-square analysis for the remaining 16 methods did not significantly relate to gender. In each of these instances, the gender hypothesis may be rejected as not indicating a statistically significant relationship for this sample population.

In examining the media resources, audio tape had a significant level of .0605 which is slightly higher than the .05 level. As stated before, other conditions might determine if audio tape is preferred by one sex or both sexes.

For the general hypothesis claiming gender based relationship with preference to training methods, no generalization can be made. However, lecture, videodisk cassette, fishbowl and notetaking were specific methodologies that showed significant relationship. Women tend to rate these methods more favorably than men. There were four other methods where women ratings were more favorable than men, e.g. t-groups, roleplaying, case studies and panel discussion but these methods only demonstrated some tendencies. Several methods show no relationship whatsoever. It appears women have had more positive experiences with most of the methods, resulting in their positive rating for each method. Women also

rated six methods (discussion, small group, simulators, t-group, case studies, and internships/apprenticeships) positively, suggesting group oriented methods and methods that utilize their experiences are very useful to employ with females. Males, on the other hand, rated no methods as very effective. Nevertheless, males rated fifty percent or more, panel and structured discussion methods as well as the question/answer sessions to be quite effective. Men appear to favor activities that are less informal. They prefer methods that are more structured and provide guidances in the learning activity.

Hypothesis 2

There is a significant relationship between the level of educational attainment and preference for training methodology. (The higher the level of educational attainment, the preference for training methods are more self-directed)

Levels of educational attainment were ascertained. Table 10 (p. 211) provides a frequency distribution and resulting cross tabulation between educational attainment and method preferences. Chi-square tests of significance were performed to measure the level of relationship between educational attainment and methodological preferences. As in the previous hypothesis, each method acts as a sub-hypothesis for which tests of significance

Educational Attainment & Preference for Methodology

	Educ	V	Q	S	N	X^2	df	SL	M
lecture	4yr	(3) 5%	(28)50%	(23)41%	(2) 4%	2.686	3	.4425	14
	Grad	(6)14%	(17)41%	(18)43%	(1) 2%				
discussion	4yr	(15)27%	(29)53%	(10)18%	(1) 2%	.7731	3	.8559	16
	Grad	(11)27%	(22)34%	(8)20%	0				
case studies	4yr	(12)25%	(18)38%	(14)29%	(4) 8%	3.184	3	.3640	23
	Grad	(9)22%	(22)54%	(9)22%	(1) 2%				
small group work	4yr	(17)32%	(23)44%	(12)23%	(1) 2%	1.879	3	.5977	18
	Grad	(14)34%	(21)51%	(6)15%	0				
videodisk cassette	4yr	(5)10%	(13)26%	(28)55%	(5)10%	6.905	3	.0756	24
	Grad	(3) 8%	(19)51%	(14)38%	(1) 3%				
individual instruc.	4yr	(14)27%	(23)97%	(9)18%	(3) 6%	1.955	3	.5816	36
	Grad	(7)26%	(15)56%	(5)19%	0				
computer instruc.	4yr	(4)10%	(18)45%	(14)35%	(4)10%	2.268	3	.5186	38
	Grad	(1) 3%	(13)38%	(16)47%	(4)12%				
simulation	4yr	(8)17%	(13)28%	(23)50%	(2) 4%	4.983	3	.1730	33
	Grad	(4)12%	(17)52%	(10)30%	(2) 6%				
games	4yr	(2) 6%	(8)24%	(15)46%	(18)24%	.7544	3	.8603	53
	Grad	(3)12%	(7)27%	(11)42%	(5)19%				
internships/ apprentice	4yr	(12)38%	(8)22%	(11)31%	(5)14%	1.391	3	.7075	49
	Grad	(7)26%	(8)30%	(10)37%	(2) 7%				
reflextive exercises	4yr	(2) 6%	(13)41%	(14)44%	(3) 9%	.3833	3	3.054	58
	Grad	(2) 9%	(4)18%	(13)59%	(3)14%				
demonstration	4yr	(9)18%	(27)53%	(13)26%	(2) 4%	1.217	3	.7488	24
	Grad	(6)16%	(16)43%	(13)35%	(2) 5%				
field trips	4yr	(4)13%	(10)33%	(12)40%	(4)13%	1.7446	3	.6267	58
	Grad	(3)13%	(5)21%	(10)42%	(6)25%				
hypothetical exercise	4yr	(5)11%	(22)48%	(16)35%	(3) 7%	.7565	3	.8598	29
	Grad	(3) 8%	(16)43%	(14)38%	(4)11%				
television	4yr	(1) 3%	(11)30%	(16)43%	(9)24%	6.302	3	.0978	41
	Grad	(3) 9%	(6)18%	(22)65%	(3) 9%				
roleplays	4yr	(7)14%	(26)30%	(13)25%	(6)12%	.3665	3	.9471	21
	Grad	(7)18%	(19)49%	(9)23%	(4)10%				
t-group	4yr	(2)10%	(6)29%	(10)48%	(2)14%	2.850	3	.4152	76
	Grad	(2)13%	(1) 7%	(10)67%	(2)13%				

Continued on next page.

Table 10 (continued)

		V	Q	S	N	X^2	df	SL	M
fishbowl	4yr	(2)13%	(2)13%	(6)40%	(5)33%	2.072	3	.5574	83
	Grad	(1) 7%	(3)21%	(8)57%	(2)14%				
brainstorming	4yr	(11)22%	(16)32%	(20)40%	(3) 6%	4.495	3	.2127	23
	Grad	(6)15%	(19)49%	(14)36%	0				
note-taking	4yr	(3) 6%	(21)40%	(26)49%	(3) 6%	7.006	3	.0717	19
	Grad	0	(10)25%	(23)56%	(7)18%				
structured discussion	4yr	(5)10%	(30)58%	(16)31%	(1) 2%	6.354	3	.0956	19
	Grad	(2) 5%	(15)37%	(22)54%	(2) 5%				
panel discussion	4yr	(3) 7%	(23)55%	(14)33%	(2) 5%	4.128	3	.2480	30
	Grad	(2) 5%	(15)38%	(17)43%	(6)15%				
question/ answer	4yr	(14)25%	(28)50%	(13)23%	(1) 2%	8.688	3	.0337	10
	Grad	(5)10%	(20)39%	(26)51%	0				
reading	4yr	(5)10%	(20)39%	(26)51%	0	4.869	3	.1816	20
	Grad	(2) 5%	(11)27%	(26)63%	(2) 3%				
overhead projector	4yr	(14)26%	(24)44%	(14)26%	(3) 6%	1.083	3	.0127	16
	Grad	(4)10%	(31)76%	(6)15%	0				
audio tape	4yr	(5)10%	(10)20%	(28)55%	(8)16%	5.723	3	.1259	21
	Grad	(3) 8%	(12)30%	(13)33%	(12)30%				
slide/sound presentation	4yr	(10)18%	(24)44%	(17)31%	(4) 7%	1.524	3	.6767	16
	Grad	(6)15%	(21)51%	(13)32%	(1) 2%				
hand-outs	4yr	(7)12%	(25)44%	(23)40%	(2) 4%	1.642	3	.6499	14
	Grad	(6)15%	(17)42%	(18)44%	0				
35mm film	4yr	(4)10%	(19)46%	(12)29%	(6)15%	1.860	3	.6019	33
	Grad	(3) 8%	(16)42%	(16)42%	(3) 8%				
newsprint	4yr	(2) 4%	(13)28%	(24)52%	(7)15%	2.528	3	.4701	31
	Grad	(1) 3%	(5)14%	(22)63%	(7)20%				
chalkboard	4yr	(5) 9%	(26)42%	(18)33%	(6)11%	7.875	3	.0487	17
	Grad	(2) 5%	(13)33%	(24)60%	(1) 3%				
simulator	4yr	(5)13%	(15)39%	(17)44%	(2) 5%	1.955	3	.5816	41
	Grad	(4)13%	(14)44%	(10)31%	(4)13%				
models	4yr	(6)15%	(23)58%	(10)25%	(1) 3%	.4974	3	.9195	37
	Grad	(4)11%	(4)54%	(11)31%	(1) 3%				
flannelboard	4yr	(2) 8%	(9)38%	(10)42%	(3)13%	2.303	3	.5117	
	Grad	0	(6)30%	(11)55%	(3)15%				

V = Very Effective
Q = Quite Effective
S = Somewhat Effective
N = Not Effective
SL = Significance Level
M = Missing

are conducted and results are shown, indicating the number and percentile rating for each of the twenty-four methods and ten media resources. The responses were based on a 4 point Likert Scale with (4) very effective and (1) not effective. "Don't knows" and missing answers were not used in the calculation.

Of the twenty-four methods examined, only one showed a significant relationship. Four others showed tendencies toward relationship and the remaining nineteen methods showed no significance.

Question/answer session - the Chi-square was computed as 8.688 with 3 degrees of freedom. The significant level is .0337. 75% four-year college graduates perceived this method to be "quite" to "very" effective. 49% graduate degrees perceived question/answer to be only "quite" effective. For this method, the hypothesis is accepted and indicates that in regards to this sample population there appears to be a significant relationship between educational attainment and preference for this particular method.

There are four methods slightly over the significant level of .05. They are: (a) videodisk cassette, (b) television, (c) note-taking and (d) structured discussion. However, the degree of relationship between educational attainment and the preference for these methods, significance level ranging from .075 - .095, demonstrate tendencies towards relationship. Under variant condition,

these methods may demonstrate a greater significance. The results of the Chi-square analysis of the remaining nineteen methods were not statistically significant. In each of these cases, the researcher rejects the hypothesis and indicates no relationship between education and preference for training methods for this sample population.

Of the ten media resources examined, two were statistically significant at the .05 level. The two are overhead projectors and chalkboard.

Overhead projectors - The Chi-square was computed as 10.835 with 3 degrees of freedom. The significance level was .0127. 32% four-year college graduate perceived this resource negatively (32%) and the graduate degrees perceived this more favorably, only 15% graduate degrees gave negative ratings.

Chalkboard - The Chi-square was computed as 7.875 with 3 degrees of freedom. This significance level is a .0487. Respondents in both categories of educational attainment perceived this resource as "somewhat" to "not" effective. While 44% four-year graduates rated this method ineffective, 66% graduate degrees also rated this method ineffective.

The remaining eight media resources did not demonstrate any level of significance that would be identified other than by chance. In examining this hypothesis, no generalizations can be drawn. Preference

for two resources have statistically significant relationship with educational attainment for this population. One other resource, audio tape, though not at a statistically significant level (.06), demonstrates a potential relationship with educational attainment.

A generalization can not be made because respondents only represented the four-year college degree and graduate degree, making the findings unpresentative of four levels of education - high school, two-year college, four-year college and graduate degree. Nevertheless, results showed both groups rated 16 out of 24 methods the same, perceiving these methods as "somewhat" or "quite" effective. Only one method, internships/apprenticeship, was considered by the majority of the four-year college degrees (33%) to be "very" effective. They also appreciated the use of a chalkboard. In the case of graduate degrees (76%), they appreciated the use of a overhead projector, rating it "quite" effective. It is interesting to point out graduate degree respondents perceived no methods to be very effective. They rated most methods "quite" or "somewhat" effective. Where the rating was fifty percent or more by graduate degree respondents to be "quite" effective, those methods, case studies, small group work simulation, individual instruction are methods often used in graduate programs as well as activities that allowed the individuals to use their experiences.

Hypothesis 3

There is a significant relationship between age groups and their preference for training methodology. (The older the adult learner the preference for training methods are more self-directed)

Recruiters responded to demographic questions about age ranges. Table 11 (p. 217) presents the raw score and percentage of each age groups' responses to the twenty-four methods and ten media resources. Chi-square tests of significance were performed to measure the level of relationship between age groups and methodological preferences. A cross tabulation was done to examine methodological preference with age as a interactive factor. The responses were based on a Likert Scale; (4) very effective and (1) not effective. "Don't know" responses and missing answers were not used in the calculation. Table 11 shows the results of the Chi-square test for each method and media resources with regards to age interaction.

In examining the twenty-four methods which were related to age at a statistically significant level .05 or less, of the twenty-four methods three showed statistically significant relationship with age. These were field trips, television, and roleplays.

Field trips - The chi-square was computed as 18.652

Table 11

Age & Preference for Methodology

	Age	V	Q	S	N	X^2	df	SL	M
lecture	21-25	(2)25%	(4)50%	(2)25%	0	11.19	9	.2625	10
	26-34	(5)11%	(15)34%	(21)48%	(3) 7%				
	35-44	(1) 4%	(16)59%	(10)37%	0				
	45+	(2) 9%	(13)57%	(8)35%	0				
discussion	21-25	(4)50%	(1)13%	(3)38%	0	13.370	9	.1465	12
	26-34	(11)26%	(23)54%	(9)21%	0				
	35-44	(5)19%	(15)58%	(6)63%	0				
	45+	(9)39%	(12)52%	(1) 4%					
case studies	21-25	(3)43%	(2)29%	(1)14%	(1)14%	6.451	9	.6941	19
	26-34	(10)27%	(18)49%	(9)24%	0				
	35-44	(6)22%	(11)41%	(8)30%	(2) 7%				
	45+	(4)18%	(10)46%	(6)27%	(2)10%				
small group work	21-25	(4)50%	(2)25%	(2)25%	0	9.801	9	.3668	14
	26-34	(14)33%	(21)50%	(6)14%	(1) 2%				
	35-44	(6)23%	(16)62%	(4)15%	0				
	45+	(9)41%	(6)27%	(7)32%	0				
videodisk cassette	21-25	(2)33%	0	(3)50%	(1)17%	10.55	9	.3077	21
	26-34	(2) 5%	(16)41%	(19)49%	(2) 5%				
	35-44	(3)13%	(10)42%	(10)42%	(1) 4%				
	45+	(3)14%	(5)23%	(11)50%	(3)14%				
individual instruction	21-25	(2)33%	(2)33%	(1)17%	(1)17%	5.191	9	.8173	34
	26-34	(9)28%	(18)58%	(4)13%	(1) 4%				
	35-44	(7)32%	(10)46%	(5)23%	0				
	45+	(5)28%	(9)50%	(3)17%	(1) 6%				
computer instruc.	21-25	(1)14%	(2)29%	(3)43%	(1)14%	6.245	9	.7152	35
	26-34	(1) 3%	(15)48%	(12)39%	(3)10				
	35-44	(3)14%	(10)48%	(7)33%	(1) 5%				
	45+	(1) 6%	(5)28%	(9)50%	(3)17%				
simulation	21-25	(1)17%	(2)33%	(2)33%	(1)17%	11.00	9	.2756	31
	26-34	(9)26%	(13)37%	(13)37%	0				
	35-44	(2)10%	(10)50%	(6)30%	(2)10%				
	45+	(1) 5%	(7)35%	(11)55%	(1) 5%				
games	21-25	(1)20%	(1)20%	(2)40%	(1)20%	4.915	9	.8416	51
	26-34	(2) 9%	(8)35%	(10)44%	(3)13%				
	35-44	0	(5)33%	(6)40%	(4)27%				
	45+	(2)11%	(3)17%	(9)50%	(4)22%				

Continued on next page.

Table 11 (continued)

	Age	V	Q	S	N	X^2	df	SL	M
internship/ apprentice	21-25	(2)50%	(1)25%	0	(1)25%				
	26-34	(8)30%	(6)22%	(11)41%	(2) 7%				
	35-44	(5)31%	(4)25%	(5)31%	(2)13%				
	45+	(5)29%	(5)29%	(4)24%	(3)18%				
reflective exercise	21-25	(1)33%	(2)67%	0	0	7.820	9	.5523	57
	26-34	(2) 8%	(7)28%	(52)13%	(3)12%				
	35-44	(1) 7%	(5)33%	(8)53%	(1) 7%				
	45+	0	(3)25%	(7)58%	(2)17%				
demonstration	21-25	(2)29%	(4)57%	(1)14%	0				
	26-34	(10)26%	(16)41%	(12)31%	(1) 3%				
	35-44	(3)12.5%	(12)50%	(7)29%	(2) 8%				
	45+	(2)10%	(11)55%	(6)30%	(1) 5%				
field trips	21-25	(2)100%	0	0	0	18.65	9	.0283	57
	26-34	(4)18%	(5)23%	(11)50%	(2) 9%				
	35-44	(2)13%	(4)25%	(5)31%	(5)31%				
	45+	0	(6)40%	(6)40%	(3)20%				
hypothetical exercise	21-25	(3)33%	(1)17%	(2)33%	(1)17%	7.855	9	.5487	27
	26-34	(5)14%	(18)50%	(11)31%	(2) 6%				
	35-44	(2) 9%	(11)50%	(8)36%	(1) 5%				
	45+	(1) 5%	(8)38%	(9)43%	(3)14%				
television	21-25	(2)40%	0	(1)20%	(2)40%	21.69	9	.0099	40
	26-34	(2) 6¢	(4)13%	(22)69%	(4)13%				
	35-44	(1) 5%	(9)45%	(7)35%	(3)15%				
	45+	0	(4)27%	(8)54%	(3)20%				
roleplays	21-25	(3)43%	(2)29%	(1)14%	(1)14%	17.75	9	.0381	17
	26-34	(9)22%	(21)52%	(11)27%	0				
	35-44	(3)12%	(14)54%	(5)19%	(4)15%				
	45+	0	(11)52%	(5)24%	(5)24%				
t-groups	21-25	(1)33%	0	0	(2)67%	13.50	9	.1409	
	26-34	(2)22%	(2)22%	(5)56%	0				
	35-44	(2)17%	(3)25%	(6)50%	(1) 8%				
	45+	0	(2)17%	(8)67%	(2)17%				
fishbowl	21-25	0	(1)100%	0	0	10.04	9	.3468	
	26-34	(1)10%	(2)20%	(6)60%	(1)10%				
	35-44	(2)18%	(2)18%	(4)36%	(3)27%				
	45+	(2)19%	(2)18%	(4)36%	(3)27%				
brainstorming	21-25	(2)33%	(2)33%	(2)33%	0				
	26-34	(8)20%	(18)45%	(14)35%	0				
	35-44	(9)38%	(5)21%	(10)42%	0				
	45+	(1) 5%	(9)43%	(8)38%	(3)14%				

Continued on next page.

Table 11 (continued)

	Age	V	Q	S	N	X^2	df	SL	M
note-taking	21-25	(1)14%	(3)43%	(3)43%	0				
	26-34	(2) 5%	(10)26%	(23)54%	(4)10%				
	35-44	(2) 7%	(8)29%	(14)50%	(4)14%				
	45+	0	(11)50%	(8)36%	(3)14%				
structured discussion	21-25	(1)13%	(4)50%	(3)38%	0				
	26-34	(3) 8%	(17)43%	(19)48%	(1) 3%				
	35-44	(4)16%	(11)40%	(9)36%	(1) 4%				
	45+	(1) 4%	(14)61%	(7)30%	(1) 4%				
panel discussion	21-25	(2)40%	(1)20%	(2)40%	0	16.18	9	.0631	27
	26-34	(3) 8%	(17)47%	(14)39%	(2) 6%				
	35-44	(1) 4%	(10)44%	(7)30%	(5)22%				
	45+	0	(11)52%	(9)43%	(1) 5%				
question/ answer ques.	21-25	(2)29%	(5)71%	0	0	9.343	9	.4062	
	26-34	(7)16%	(23)54%	(13)30%	0				
	35-44	(5)18%	(11)39%	(12)43%	0				
	45+	(3)13%	(13)57%	(6)27%					
reading	21-25	(1)17%	(2)33%	(3)50%	0	7.855	9	.5488	
	26-34	(3) 8%	(9)23%	(27)68%	(1) 3%				
	35-44	(4)14%	(10)36%	(13)46%	(1) 4%				
	45+	(1) 5%	(11)50%	(10)46%	0				
overhead projector	21-25	(4)50%	(1)13%	(2)25%	(1)13%	17.56	9	.0408	12
	26-34	(8)19%	(21)50%	(11)27%	(2) 3%				
	35-44	(4)15%	(19)70%	(4)15%	0				
	45+	(2) 9%	(18)78%	(3)	0				
audio tape	21-25	(1)17%	(1)17%	(2)33%	(2)33%	7.285	9	.6074	17
	26-34	(4)10%	(9)22%	(21)51%	(7)17%				
	35-44	(3)11%	(10)36%	(9)32%	(6)21%				
	45+	0	(4)20%	(10)50%	(6)30%				
slide/sound presentation	21-25	(2)25%	(3)38%	(1)13%	(2)25%	14.28	9	.1126	12
	26-34	(10)24%	(15)36%	(16)38%	(1) 2%				
	35-44	(3)11%	(17)63%	(6)22%	(1) 4%				
	45+	(3)13%	(12)52%	(7)30%	(1) 4%				
handouts	21-25	(3)38%	(2)25%	(2)25%	(1)13%	12.38	9	.1925	10
	26-34	(6)14%	(18)41%	(20)46%	0				
	35-44	(3)11%	(12)43%	(13)46%	0				
	45+	(2) 9%	(11)50%	(8)36%	(1) 5%				

Continued on next page.

Table 11 (continued)

	Age	V	Q	S	N	X^2	df	SL	M
35mm film	21-25	(1)33%	(1)33%	0	(1)33%	7.454	9	.5899	
	26-34	(4)11%	(15)43%	(13)37%	(3) 9%				
	35-44	(3)12%	(10)40%	(8)32%	(4)16%				
	45+	0	(10)50%	(8)40%	(2)10%				
newsprint	21-25	(2)33%	(1)17%	(2)33%	(1)17%	33.63	9	.0001	27
	26-34	(1) 3%	(3) 8%	(29)81%	(3) 8%				
	35-44	0	(9)38%	(8)33%	(7)29%				
	45+	0	(6)32%	(9)47%	(4)21%				
chalkboard	21-25	(2)29%	(2)29%	(2)29%	(1)14%	10.14	9	.3388	13
	26-34	(3) 8%	(17)42%	(19)46%	(2) 5%				
	35-44	(2) 7%	(9)32%	(14)50%	(3)11%				
	45+	(1) 4%	(14)61%	(7)30%	(1) 4%				
simulators	21-25	(3)33%	(1)17%	(2)33%	(1)17%	11.00	9	.2756	39
	26-34	(5)16%	(14)44%	(13)41%	0				
	35-44	(1) 6%	(9)50%	(5)28%	(3)17%				
	45+	(1) 6%	(6)33%	(8)47%	(2)12%				
models	21-25	(1)17%	(3)50%	(1)17%	(1)17%	10.08	9	.3433	36
	26-34	(7)20%	(19)54%	(9)26%	0				
	35-44	(1) 5%	(11)55%	(7)35%	(1) 5%				
	45+	(1) 7%	(10)67%	(4)27%	0				
flannelboards	21-25	0	(1)33%	(1)33%	(1)33%	8.779	9	.4578	67
	26-34	(2) 9%	(6)27%	(13)59%	(1) 5%				
	35-44	0	(4)36%	(4)36%	(3)27%				
	45+	0	(5)56%	(3)33%	(1)11%				

V = Very effective
Q = Quite effective
S = Somewhat effective
N = Not effective

with 9 degrees of freedom. The significance level is .0283. The differences were shown in the rating this method "very" effective: (a) 21-25 (100%), (b) 26-34 (18%), (c) 35-44 (13%) and (d) 45+ (0%). The 21-25 perceived this method "very" effective. As the group gets older the less positive it is rated, perceiving field trips as ineffective.

Television - The Chi-square was computed as 21.6913 with 9 degrees of freedom. The significance level is .0099. The differences were shown in the age groups rating television "very" effective: (a) 21-25 (40%), (b) 26-34 (60%), (c) 35-44 (1%) and (d) 45+ (0%). The perceptions for this method is shared by the 21-25 and the 26-34. Both groups perceived this method as effective. As for the older age groups, their perceptions are contrary, rating telvision much lower.

Roleplays - The Chi-square was computed as 17.756 with 9 degrees of freedom. The significance level is .0381. There was a distinct difference in the perception of this method between the 21-25 and 45+ age groups. The 21-25 (43%) rated roleplays positively whereas the 45+ (0%) did not perceive it very effective at all.

For each of these methods, the researcher accepts the hypothesis and indicates that for this sample population there appears to be a significant relationship between age and preference for training methodology. There is one method, panel discussion, that the significance level .06

was slightly higher than the .05 level. For this method, the hypothesis is rejected. The degree of relationship between age and this method demonstrates a tendency toward interaction. Under variant conditions, this method may demonstrate greater significance. The results of the Chi-square analysis of the remaining 20 methods show no statistically significant relationship between age and preference for training methods for this population. In each of these instances, the hypothesis is rejected and indicates no significant relationship.

Examining the ten media resources, there are two resources that result in a .05 or less significance level. They are overhead projector and newsprint.

Overhead projector - The Chi-square was computed at 17.5469 with 9 degrees of freedom. The significance level is .0408. The significance is shown in the rating of the 35-44 age group. The (a) 21-25 (63%), (b) 26-34 (69%) and (c) 45+ (87%) rated overhead projector postively, perceiving it to be "very" effective. The 35-44 (15%) did not perceived this resource to be as effective.

Newprint - The Chi-square was computed at 33.6383 with 9 degrees of freedom. The significance level is .0001. There were many perceptions about this resource. The differences can be seen in rating newsprint "somewhat" effective; the 26-34 (81%), 21-25 (33%), 35-44 (33%), and 45+ (45%).

For each of these media resources, the hypothesis is

accepted and indicates that in regards to this sample population there appears to be a significant relationship between age and preference for training methodology. The other eight media resources do not interact at a statistically significant level.

For a general hypothesis claiming that there is a relationship between age and preference for methodology, no generalization can be made. However, as discussed above, some methods do show significant relationship, some demonstrate tendencies, and several show no relationship at all. There were however some distinct perceptions between the age groups e.g., 21-25 and 45+. The highest percentage rating for methods that are perceived by the 21-25 age group to be effective or ineffective are methods usually used in educational institutions. Because members of this age group are recent graduates, it is reasonable to conclude that their ratings reflect this experience. The older group (45+) tend to rate those methods, e.g. discussion, case studies, and small group work, that utilized their experiences as "quite" effective. Additionally, there is a definite opinion by the 45+ age group (67%) that perceives computer instruction to be "somewhat" to "not" effective. This was not shared by the other age groups. The 21-25 age groups also had some definite opinions about two methods. They perceived fishbowl and field trips to be either "very" effective or "quite" effective. On a whole, most of the methods were

perceived by all groups to be useful but with varied degreees of effectiveness.

Hypothesis 4

There is significant relationship between corporations' size and their use of adult learning principles in their training practices for recruiters. (Not all corporations size train their recruiters by the principles of adult learning)

In order to determine the utilization of adult learning principles in corporations, the questionnaire contain several items that pertain to one of the ten adult learning principles. (See table 12, p. 225) Table 13 (P. 226) presents means, standard deviation, relative mean, and number of questions for the entire sample and by coporation type. F probability and ETA squared are also presented for the entire population.

For each item a value of four (4) was assigned to always/great/very; three (3) was assigned to sometimes/considerable; two (2) was assigned to rarely/some/somewhat; and one (1) was assigned to never/little/not. Missing cases were excluded from analysis. Respondent totals were calculated for each principle. Respondent totals were then grouped by corporation type and an arithematic average (mean) was calculated based on corporation size. Mean response rates

Table 12

Principle	Items
- adults are pragmatic learners	6, 12a, 12b, 12g
- enable adults to become self-directed learners	13a
- adults use their experience as a guide in choice of learning	7, 8, 13d
- adults learn best when they are actively involved in planning and evaluating learning outcomes	13e
- adults learn best when there is a match between teaching methods and their learning style	9a
- adults have prior learning experiences that should be taken into account when designing learning or education	10, 11, 12f, 13b, 14, 15
- adults are problem solvers	12c, 12d, 12e, 12h
- adults learn best proceding at their own pace	16
- development of self-evaluation skills is important in becoming an effective adult learner	17, 18
- highest goal to make adults aware of the role of psychological, social, and cultural factors in self-development	9b

Table 13

Utilization of Adult Learning Principles by Size

		X Small	Small	Medium	Medium Lg.	Large	Entire Pop.	F.prob	ETA SQrD
Principle 1									
x		9.66	10.44	9.17	7.66	9.35	9.50	.2628	.0722
SD		3.14	3.75	2.53	2.59	3.14	3.21		
relative x		1.9	2.0	1.8	1.5	1.8	1.9		
No of ques.	5								
Missing	38								
Principle 2									
x		10.60	9.06	10.50	6.75	10.00	9.46	.1553	.1647
SD		1.81	2.90	2.07	2.63	2.58	2.69		
relative x		3.5	3.0	3.5	2.2	3.3	3.1		
No. of ques.	3								
Missing	71								
Principle 3									
x		6.83	6.87	6.76	5.55	6.30	6.53	.5883	.0384
SD		1.32	2.87	2.01	2.18	1.5	2.1		
relative x		2.2	2.2	2.2	1.8	2.1	2.1		
No. of ques.	3								
Missing	30								
Principle 4									
x		2.16	2.48	2.68	1.66	2.33	2.37	.0350	.1097
SD		.752	.986	.900	.778	.912	.943		
relative x		2.1	2.4	2.6	1.6	2.3	2.3		
No. of ques.	1								
Missing	19								

Continued on next page.

Table 13 (continued)

		X Small	Small	Medium	Medium Lg.	Large	Pop.	F.prob	SQrD
Principle 5									
x		38.6	34.4	36.8	25.0	32.0	34.2	.3746	.1831
SD		10.5	11.9	4.45	4.24	5.65	8.36		
relative x		2.7	2.4	2.6	1.7	2.2	2.4		
No of ques.	14								
Missing	87								
Principle 6									
x		13.6	14.80	15.62	11.25	14.25	14.36	.1421	.1102
SD		2.51	4.62	3.66	3.80	3.19	3.98		
relative x		1.7	1.8	1.9	1.4	1.7			
No. of ques.	8								
Missing	49								
Principle 7									
x		-	48.0	55.5	34.0	47.2	47.9	.2891	.2284
SD		-	15.04	6.40	14.14	7.8	12.6		
relative x			2.4	2.7	1.7	2.3	2.3		
No. of ques.	20								
Missing	94								
Principle 8									
x		2.50	2.51	2.57	2.33	2.72	2.55	.8216	.0176
SD		.547	1.08	.925	.984	.702	.913		
relative x		2.5	2.5	2.5	2.3	2.7	2.5		
No. of ques.	1								
Missing	22								

Continued on next page.

Table 13 (continued)

Entire	ETA	X Small	Small	Medium	Medium Lg.	Large	Pop.	F.prob	
Principle 9									
x		4.83	5.71	5.72	4.20	4.95	5.28	.0866	.0991
SD		.752	1.88	1.31	1.68	1.82	1.72		
relative x		2.4	2.8	2.8	2.1	2.4	2.6		
No of ques.	2								
Missing	30								
Principle 10									
x		2.80	2.11	2.14	2.22	2.11	2.17	.7331	.0265
SD		1.64	.993	1.01	.833	1.02	1.02		
relative x		1.6	.99	1.0	.83	1.0	1.0		
No. of ques.	1								
Missing	33								

were also calculated for the entire population. By dividing the individual corporate size' mean by the number of questions related to that specific principle, the relative mean was provided. This relative mean is in the range of the ordinal scale and can, therefore, be directly compared.

An analysis of variance was calculated to further determine the existence of any relationship between corporation size and utilization of adult learning principles. These ten adult learning were articulated and discussed in the literature review chapter. The general hypothesis has ten sub-hypothesis that are related to the 10 principles. The results of analysis of variance as related to each of these principles will be discussed in order.

Principle I. The relationship between corporation size and the utilization of principle 1 (adults are pragmatic learners) an F probability .2628 and an ETA Square .0722 were computed.

Principle II. The relationship between corporation size and the relationship of principle 2 (goal to enable adults to become more self_directed learners) an F probability .1553 and an ETA Square 1.647 were computed.

Principle III. The relationship between size and utilization of principle 3 (adults use their experience as a guide in choice of learning outcomes) an F probability .5883 and ETA Square .0384 were computed.

Principle IV. The relationship between size and utilization of principle 4 (adults learn best when actively involved in planning and evaluating the learning process) a F probability .0350 and ETA Square .1094 were computed.

Principle V. The relationship between size and the utilization of principle 5 (adults learn best when there is a match betweem teaching style and their learning style) an F probability .3746 and a ETA Square .1831 were computed.

Principle VI. The relationship between corporation size and the utilization of principle 6 (adults have prior learning experience that should be taken into account when designing learning) an F probability .1427 and ETA Square .1102 were computed.

Principle VII. The relationship between corporation size and the utilization of principle 7 (adults are problem solvers) an F probability .2894 and an ETA Square .2284 were computed.

Principle VIII. The relationship between corporation size and the utilization of principle 8 (adults learn best when they proceed at their own pace) an F probability .8216 and an ETA Square .0176 were computed.

Principle IX. The relationship between corporation size and the utilization of principle 9 (development of self-evaluation skills are important in becoming a more effective adult learner) an F probability .0866 and a ETA

Square .0991 were computed.

Principle X. The relationship between corporation size and the utilization of principle 10 (highest goal for adults is to become aware of psychological, social and cultural factors in self-development) an F probability .7331 and ETA Square .0265 were computed.

Of the ten principles examined, only principle "four" showed a significant relationship (.0350) between corporation size and the utilization of adult learning principles. Principle four focus on adults being actively involve in the planning and evaluation of learning. The number of employees to train for extra small, medium large and large corporations appear to be a factor in permitting learners to participate in the planning process. For this principle, the researcher accepts the hypothesis and indicates that for this sample population there appears to be a significant relationship between size and the utilization of adult learning principles. Principle nine (.0991) showed tendencies of a relationship. For this principle, the hypothesis is rejected. However, the degree of relationship show tendency towards a relationship. Under variant conditions, this principle may demonstrate greater significance. The results of the remaining seven principles show no statistically significant relationship between size and the utilization of adult learning principles for this population.

The mean utilization of a particular principle by a

corporation size demonstrates the level of utilization of the principle in relation to the entire sample. The following tabulation identifies by corporation size which principles are utilized above the average mean score for the entire population:

Size	Principle
extra Small	1,2,3,5,10
small	1,3,4,5,6,7,9
medium	2,3,4,5,6,8,9
medium large	10
large	2,5,8

Based on the mean score determining the number of principles being used, mean scores above the entire population indicate, small and medium size corporations are using more adult principles than the larger corporations. Size appears to be a factor. These corporations are utilizing six or seven principles whereas the large corporations are using one to three. The medium large corporations are using only one and the large corporations are using three. In addition, corporations are using the ten principles but principle 7 is the least used. This principle addresses the development of problem solving skills, a skill educators are known to fall short in developing. There is no one principle used often.

Hypothesis 5

There is a significant relationship between corporation's size and the amount of training directed toward recruiter training. (The size of a corporation is related to the amount of training directed towards recruiters)

A cross tabulation was computed to show the interaction between corporation size and the amount of training directed towards recruiters. The Chi-square was calculated at 14.9706 with 12 degrees Of freedom. The signicance level is .2430. A raw score, and percentage were given for each size in their response to amount of training received. The responses were based on a 4 point Likert Scale; (4) great and (1) little. "Don't know" and missing responses are labeled "missing" and not used in the calculations. Table 14 (p. 237) shows the results.

There were more (27) small size organizations (1,000-8,000) represented in this sample, then (19) large (107,000-1,000,000); (11) medium large (40,000-93,500), (6) extra small (150--640) and (2) medium (10,000-35,000). The extra small corporations do the least amount of training. Based on the total score for "little" to "some" training, 66.6% extra small corporations rated little training. The small corporations (1,000-8,000) rating was split between little and "some" and "great" (44.4%) or "considerable" (55.5%). Medium size corporations compare

the same to the extra small corporations, indicating 61.6% "little" to "some" training. The larger corporations do the most training. The large corporations (107,000-1,000,000) indicated "considerable" to "great" (63.2%) amount of training directed towards recruiters. Of all the sizes, the medium large corporations (72.8%) (40,000-93,500) do the most training. They indicated considerable to great amount of training is directed towards recruiters. The results of the Chi-square analysis did not demonstrate for this sample population a significant relationship between size and the amount of training received by recruiters. Therefore the hypothesis is rejected.

This sample population indicated that recruiters are receiving training (81%) by corporations from all sizes. All large corporations (107,000-1,000,000) train their recruiters in some way, having 0% in little training, whereas the other sizes had ratings in all four categories of little, sometimes, considerable, and great amount of training for recruiters.

Hypothesis 6

There is a significant relationship between corporations type and the amount of training directed towards recruiters. (The type of corporation is related to the amount of training directed towards the recruiters)

A cross tabulation was computed to show the relationship between corporations' types and the amount of training directed towards recruiters. Chi-square was calculated with 32 degrees of freedom. A significant level was given .2725. A raw score and percentage was given for each coporation type in their response to the amount of training. The responses were based on a 4 point Likert Scale, (4) great and (1) little. "Don't knows" and missing responses are labeled "missing" and are not use in the calculation. Table 15 (p. 237) shows the results.

Responses are obtained from nine group types, (38) non-specific manufacturers, (14) government, (12) chemical manufacturers, (11) computer manufacturers, (8) research, (5) consumer product manufacturers, (5) retail, (4) communication and (1) unknown company. Communication (100%), government (64.3%), computer manufacturer (63.7%) indicated a higher percentage in "great" to "considerable" amount of training received by recruiters. Consumer products manufacturers (80%) and research type corporations (62%) on the other hand, indicated a higher percentage in "little" to "some" training for reruiters. Nonspecific manufacturers and chemical manufacturers were fairly equal in their rating. Nonspecific manufacturers (47.4%) indicated "little" to "some" training as well as 47.4% in "considerable" to "great" amount of training. Chemical manufacturers (50%) indicated "little" to "some" amount of training and 50% for "considerable" to "great".

Retail corporations(60%) are doing some training, indicating a higher percentage in this category. The results of the Chi-square analysis did not demonstrate for this sample population any significant relationship between corporation type and the amount of training received by the recruiters. The hypothesis is rejected.

Communication, and government type of corporations, direct considerable attention to recruiter training; however the communication type corporations focus more attention to training their recruiters. In fact, communication type companies (100%) do the most training of all the types of corporations represented in this sample. Research type of corporations direct the least attention to recruiter training.

Table 14

Corporation Size and the Training of Recruiters

Size	L	S	C	G	X	df	SL	M
1 X small	(2)33%	(2)33%	(1)17%	(1)17%	14.97	12	.2430	28
small	(7)26%	(5)19%	(9)33%	(6)22%				
medium	(5)24%	(8)38%	(8)38%	0				
medium large	(2)18%	(1) 9%	(5)46%	(3)27%				
large	0	(7)37%	(8)42%	(4)21%				

Table 15

Corporation Types and the Training of Recruiters

	L	S	C	G	X	df	SL	M
research	(3)38%	(2)25%	(2)0	0	36.36	32	.2725	14
communication	0	0	(3)75%	(1)25%				
government	(4)29%	(1) 7%	(5)36%	(4)29%				
non-specific	(6)16%	(12)32%	(16)42%	(2) 5%				
manufacturer								
chemical	(2)17%	(4)33%	(5)42%	(1) 8%				
manufacturer								
computer	(1)9%	(2)18%	(3)27%	(4)36%				
manufacturer								
consumer product	(3)60%	(1)20%	0	(1)20%				
manufacturer								
retail	0	(3)60%	(1)20%	(1)20%				

L = little
S = some
C = considerable
G = great

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The summary, conclusions and recommendations are presented in this chapter. The summary is an overview of chapters one, two and three. Conclusions and recommendations and recommendations for further study are drawn from the results of the data reported in chapter four.

Summary

Employee training has played an integral part in the development of job-related skills for sometime, employee training is directly tied to the growth of U.S. industries. The training of employees dates back to the eighteenth century when emphasis was placed on manual training. During this time, manual training was considered a necessary component that should be part of a curriculum. Educators believed that education should do more than train the mind. There should be activities such as wood work and leather work that would give students a better understanding of the world. Manual training was supported by communities especially business communities. They saw manual training as a way of producing efficient

workers. Eventually, the popularity of such training diminished; employers questioned whether the skills taught in manual training were transferrable to the job. Instead, business began supporting vocational education. Vocational education was similar to manual training; but it emphasized the teaching of job preparatory skills that aided in successfully performing a job. Eventually, the corporations began establishing their own training schools to accommodate employees and to ensure proper skill training.

Today, workplace training has expanded into training and development, adopting many roles and funtions; indeed, it is viewed as a link to companies' success. Training is equally vital to employees developing job skills, obtaining career goals and satisfying personal aspirations. In 1985, ASTD reported that training is picking up where formal education left off, providing most skills for adults within the workplace. As a result, corporations have increased: (a) in number of people being trained, (b) the amount of money spent on training, and, (c) the scope of which it delivers. Corporations have turned into institutions of lifelong learning, becoming the largest delivery system for adult education.

As the history of workplace training evolved, corporations assumed roles similar to educational institutions. Consequently a relationship between education and industry developed. One in particular is

the relationship that exists between recruiters and college placement officers. Employers sought out college placement offices to aid them in finding qualified college graduates. Placement offices were utilized as places to exchange information. The recuiters exchanged information about their company and the college applicants about themselves. The number of recruiters had increased as well as the amount of services provided by college placement offices. It became necessary for a more systematic and comprehensive placement program to service the entire college campus. It was also believed by employers that a more systematic recruitment procedure needed to be established. In the late nineteen fifties, recruiting was at an all time high. A 'Code of Ethics" and training were the focus of attention at that time so that recruitment on collge campuses would sucessfully continue.

College placement has also undergone major changes since its beginnings in the late nineteen twenties. One major change was due to the social unrest of the sixties. This period was a time of questioning and introspection. Many college students challenge the educational system they were mainstreamed in, demanding an education that was more personalized and addressed the needs of the learner. College students were also questioning the significance of a college degree in relationship to their personal goals. They viewed working and making money secondary to their

personal aspirations. Placement offices began providing career counseling services which assisted students in determining how best to achieve their goals and aspirations. Not only did college placement offices have to make changes, but colleges and employers had to change their scope in order to address the new attitudes that prevailed.

Colleges responded to the new ways of thinking by developing curricula that spoke to the needs of the learner. Educational institutions were incorporating methods and practices from the field of adult education that had already been conceptualized since the early nineteen twenties by adult educators. Colleges found the adult education curriculum, andragogy, addressed the learning needs of the learner, thereby making andragogy a legitimate methodology for learning. This was also a time when the field of adult education received acceptance from colleagues from the field as well as from other educators in the training field. Attention focused on the adult learner. There were many other thoughts about the adult learner which were presented by adult educators in adult education and training literature. Six adult educators were considered by the literature to offer "theories" that contribute to a better understanding about how adults learn and/or prescribes methodologies that address the learning needs of adults. Eduard C. Lindeman, Malcolm Knowles, Jack Mezirow, and Allen Tough examined the adult

learner and inferred that adults came to a learning situation with an already established agenda. Therefore, it was up to the educator to seek this information out so that learning activities were relevant to the learner. They prescribed ways to accomplish this, e.g, incorporating self-directed learning, involving learners in the planning of a curriculum and implementing self exploratory techniques. B. F. Skinner and David Kolb were among the other educators considered to be major contributors to the field. They provided an understanding about learning in general as well as offering the methodologies that complement their understanding. Adult educators found in order to address the diversity of adult learners, many methods had to be employed. Adult educators adopted Skinner's programmed instruction which was designed for individualization and went at the pace of the learner. Kolb's Learning Style Inventory was utilized to capitalize on the many experiences adult had accumulated. Although "theories" were not offered on how the adults learn by these six adult educators/theorists, adult educators had adult learning principles that gave a deeper understanding about the adult learner and methodologies recommended that were applicable for them.

In developing training programs, corporate trainers informally utilized adult learning principles, although the extent of the utilization is not documented. In fact, there appears to be very little collaboration between

adult educators and trainers whose business is to teach adult learners. Additionally, there is a scarcity of recent empirical data that has been brought forth by people in the learning business, particularly by adult educators or trainers. Very little is known about the adult learner, whose learning experience is provided by corporate trainers. One group of adult learners where little is known about their learning experience in corporations are recruiters. Recruiters play a major role in the selection of qualified perspectice employees. Some researchers have realized the crucial role they play and have conducted studies on interviewing, a universally used technique by recruiters. Researchers have found interviewing to be very subjective and a technique that requires skill. They have recommended interview training in order to develop interviewing skills and to minimize subjectivity.

The main thrust of this investigation of the present study has been: (a) to provide a careful review of the adult education literature in order to present sound adult learning principles; (b) to articulate the adult learning principles that underpin corporate training for recruiters; and, (c) to determine the kinds of practices recruiters find effective in their training as recruiters.

A 23-item questionnaire was constructed. Items on the questionnaire related to: activities that represented adult learning principles, training methods preferred by

recruiters and the amount of training received by recruiters. In addition, the recruiter's age, sex, educational attainment and name, size and type of corporation was obtained. Chi-square and analysis of variance were the two statisical test used. The data collected were reported in raw scores and percentages. The hypotheses were rejected at the .05 level of significance. Results of the analysis were presented in narrative and tabular form.

Conclusions and Recommendations

The intent of this study was to identify the adult learning principles utilized to train corporate recruiters, and to determine the methods recruiters found to have been most effective and least effective in their training as recruiters. An important element, through the literature review, was to present to corporate training managers and trainers a theoretical background about the adult learner by presenting ten adult learning principles. These ten principles were provided to serve as a checklist which corporate training programs could use to identify the adult learning principles they are using, as well as to cross check the ones they are not using so that they can begin to incorporate them into their training programs. The results of this study reveal three things about corporate training programs for recruiters.

Adult learning Principles - First, based on the perceptions of the sample population, corporations are operating on sound adult learning principles. Yet, they are not articulating these principles and systematizing them as the theoretical foundation from which all training programs are designed and implemented. Nevertheless, corporations are training their recruiters by principles of adult learning. It was found that although all ten principles were being used there were some principles more commonly used then others. In addition, there were some principles hardly used at all. It is not surprising that the two most common principles used were: (a) adults are pragmatic learners, and (b) educators enable adults to become more self-directed learners.

Traditionally, it is company practice to orient employees on the company's policies and programs, fringe benefits, retirement plan and child care, to name a few. It is also common practice to have corporate-sponsored seminars/workshops as well as other academic seminars evaluated to give the trainers an idea of the workshops' effectiveness and relevancy. Moreover, employee performance appraisals are commonly used to give employees an idea of their strengths and weaknesses. In addition, two factors are responsible for the high profile of career counseling frequently found in corporations. One of these factors is that more women, handicapped employees and minorities are entering into the workforce. The other

factor is that employees are retiring at a much later age. While corporations are providing practical information to employees that will address their personal and/or social needs, corporations are addressing the principle that adults are pragmatic learners.

Additionally, corporate training programs are allowing their recruiters to be self-directed learners. This too was not surprising to learn. Since the advent of programmed instruction and the information age, more corporate training programs are incorporating computer assisted instruction (CAI). This method allows learners to direct their learning by proceeding at their own pace. Because the influence of Malcolm Knowles and David Kolb in corporate education, another commonly-used method is the learning contract. A learning contract allows the employee, along with the trainer, to decide what learning activities will best meet the learning objective. These methods, CAI and learning contracts, are practices used by corporate training programs that suggest trainers enable their employees to become self-directed learners.

There were two adult learning principles recruiters perceived to be the least used in corporate recruiter training programs. These two little-used principles are that adults are problem solvers, and adults learn best when they are actively involved in planning and evaluating the learning process. These principles are considered two important features that distinguish adult education from

the rest of the field of education. When we take a look at the adult learner, he/she is involved in a learning situation to satisfy a particular need or needs. By satisfying these needs, the adult attempts a learning activity through a problem-solving approach. What appears to happen in a training situation is that information or solutions are given to employees via the trainer. This study suggests corporate training programs do not engage recruiters in problem-solving activities that develop employees' analytical skills and/or problem-solving skills. This is not a surprise. There is not an educational enterprise in this nation which emphasizes development of problem-solving skills. Learners learn most of their information by rote and memorization. This appears to be true for corporate education and training programs as well.

The other principle least used by corporate training is to actively involve the recruiter with the development and evaluation of the learning process. This principle is key if workshops are to be relevant to the learning needs of the employees as well as provide the needed skills for employees to continue productivity. One way to ensure employees' effectiveness at a job is to allow the employees to determine their areas of strength and weakness. This employee-based self-evaluation could be the foundation on which training curricula could be built.

Based on the conclusion that corporations are

utilizing adult learning principles, two recommendations are made. First, corporations should continue using the principles of adult learning to train their recruiters. However, corporate training managers and trainers should familiarize themselves with the adult education literature so that they can identify exactly what principles are being used. Secondly, in order to provide knowledge as to what principles prove to be effective in the training of recruiters, corporate training classrooms should be used as "laboratories". Also, these principles should be tested in other learning environments. Corporations are now conducting training away from the workplace. Corporations are engaging their learners in learning activities in an atmosphere that is considered to be less stressful and more relaxed to enhance employees' learning. The ten adult learning principles discussed in this work should be tested to determine under what environmental conditions they work best. Finally, it is believed by adult educators that teaching the adult learner by the principles of adult learning will improve the learners' performances in the classroom. If this is the case, then it would be important to know whether training employees in accordance with the ten principles of adult learning would improve productivity.

Training Practices - A second conclusion derived from the results of this study is that some training practices are perceived to be more effective than others. The

determination of whether a training practice is effective or not effective is influenced by the recruiters' sex, age and educational background. It is important to note that females in general find education to be a rewarding experience. This is reflected in their postive ratings of all training practices. There are some methods, e.g., small group work, case studies, and t-groups that receive higher ratings than the others, which indicate that group-oriented activities would be most successful with this group. The education experience for men appears not to be the same as for women. Men do not perceive all training practices to be effective. Men too find some methods more compatible with their learning style than others. Men tend to favor the conventional methods, e.g., lecture/discussion, panel discussion and computer instruction that are less informal and group-oriented.

Age is another factor that influences recruiters' preferences for training methods. The four age groups, 21-25, 26-34, 35-44 and 45+ all have some preference for training practices. What is interesting is that there are some distinct differences between the 21-25 age group and the 45+ group. David Kolb suggests from his research with college students that students adapt their learning styles to the teaching styles of the academic discipline they are enrolled in. The 21-25 age group, an age group with less work experience than the 45+ group, clearly preferred those methods reflecting their previous college

experience. The 45+ age group, an age group with an academic background but also with more life and work experience, preferred those methods that utilized their experience. This is not surprising because adult use their experiences as a guide in their learning. This is particularly the case with the 45+ age group.

In addition, there is one training method that deserves attention at this time. Computer instruction was overwhelmingly negatively rated by the 45+ age group. Computer assisted instruction (CAI) is one method often used by corporate training programs to train their employees. As computers become more simple to use and more sophisticatedly programmed to meet every training need, the more often they will be used. It is important to know that the older group still meets the computer(s) with resistance. Although CAI is a method that allows the adult learner to proceed at his/her own pace, for the older adult learner, methods that utilize their experiences are ones most preferred and should be incorporated in training.

The conclusion that there are training practices found to be more effectice than others and that the determination of their effectiveness is influenced by the learner's age, sex and educational background, should be considered by corporate training managers, trainers and in some cases, the curriculum developer. This information is valuable if viable training programs are to exist for

recruiters. It is necessary for corporate training personnel to know how important this information is when developing training programs. They should be aware of the different learning stlyes of their learners and their preference for training practices in order to design and implement successful training programs for recruiters. Therefore it is recommended that corporate training personnel make a major effort to become aware of individual learning differences. Inventories and evaluations should be incorporated in training programs that provide information on the content, delivery and methods as well as individual preference for training practices. Knowledge such as this will be useful when present programs are revised and new program are designed to meet recruiters learning needs.

The Recruiter- The final conclusion and recommendations concern a topic that emerged as the study progressed. One that I recognize as considerable interest is the role of corporate recruiters within the corporation. In reviewing the literature, there is a nucleus of information on recruiters, the interviewing process and recruiter training programs. It has occurred to me that recruiters play a very valuable role in their corporations' structure. Recruiters are key in determining who will be the personnel to work for their corporations. Recruiters must select employees that are flexible in order to adapt to the rapidly changing

technological society. This raw material must to able to compete within the labor market. They must be educable in order to be swiftly trained and re-trained. Recruiters must identify individuals who can ingeniously create a market that will allow a corporation to stand out from all the rest.

As the the make-up of the work force change, e.g., more women, minorities and handicapped employees are hired, recruiters must also be sensitive to their issues. These responsibilities, among the many others recruiters manage, surely identify recruiters as key people in their corporations. Corporations must recognize the pivotal role recruiters play in their organization; and, corporations must train them for this role. Recruiters are, in fact, career and education counselors, social workers and admission officers.

Based on this study, a general conclusion can be made that most corporations are doing some type of training for recruiters. However, it is recommended that corporations re-examine the training of recruiters. The training of recruiters should not only deal with affirmative action and how to interview. Training should bring into conscious awareness the subjectivity of the interviewing process. This training would deal with topics on rater's errors and a general discussion on impressionistic interviewing. Training should teach an understanding of the social, economical and political issues. This type of

training would direct attention to topics on racism, sexism, and the like.

As mentioned previouly, the make-up of the work has change. Corporations should look at who is being sent to college campuses to do the recruiting. Traditionally, recruiters are white, middle-aged male. Corporations need to ask themselves does this reflect the future work force. Corporations need to select and train more women, minorities and handicapped recruiters to recruit at colleges and universities. They are the people who will be more sensitive to the needs of the personnel coming to corporations. Corporation need to not only look at who is being sent to recruit but also what expertise the recruiter should have when visiting colleges.

As more employees look to upgrading their skills and obtaining degrees and/or certification through their corporations' education programs, recruiters are becoming career and education counselors. It is during the interviewing process that prospective candidates inquiry about the education and career opportunities of a company. Recruiters are expected to provide information that will give the candidate an insight on how his/her career objectives match the opportunities provided by a corporation. Recruiters <u>are</u> career and education counselors, they should be trained for these roles. Training should orient recruiters on the trends of the labor market, the career opportunities within a

corporation and the identification of those candidates who career paths are identical and, the adult education services available to them.

Recommendations for Future Study

The conclusions and recommendation mentioned suggest further study. The present study could be refined by the following:

1. Researchers should observe different types of corporations as well as different corporation sizes to get first hand information on training practices;
2. In order to determine the amount of training recruiters receive, restate question (22) of the questionnaire, information may be muted based on the way the question is stated;
3. Include a knowledge question in the questionnaire that addresses "don't know" responses, e.g., don't know because the respondent received no training, or the respondent doesn't know the answer or the respondent is not familiar with training practices or terminology;
4. An analysis of variance computed to determine if preference for training methods by corporation type and size are related to methods often employed by corporate training programs;

5. A questionnaire constucted to survey training managers to compare their perceptions of what is practiced in corporate training for recruiters to the responses of the recruiters;
6. Hypotheses should be reformulated about adult learners' preferences for methods. Specify the age, sex and educational level and where, perhaps, a relationship could exist;
7. Do random sampling that will give more numbers to make a determination and generalization; and, the final recommendation for future study,
8. Examine the role of the corporate recruiter and corporate recruiter training programs within the corporation.

APPENDIX A

QUESTIONNAIRE

(PLEASE CHECK ONE)

1. Age: _____(21-25) _____(26-34) _____(35-44) _____(45-54) _____(55+)

2. Sex: _____ female _____ male

3. (CHECK THE HIGHEST LEVEL OF EDUCATION)

   Years of Education:

   _____ high school

   _____ 2 yr. college degree

   _____ 4 yr. college degree

   _____ graduate degree

   _____ other (please specify)

4. Name of organization _____

   Type of organizations _____

Note: A workshop/seminar for the purpose of this study is defined as any formal or informal learning activity conducted by the training department of your corporation either on site or at other facilities.

(INDICATE YOUR ANSWER FOR EACH TOPIC BELOW BY CIRCLING ONE OF THE AVAILABLE CHOICES.)

5. Your corporate training and development department offers workshops/seminars dealing with...

   - career development.....YES NO

   - child care.....YES NO

   - budgeting your money.....YES NO

   - how to fix/work.....YES NO

   - aging/death.....YES NO

   - job specify training.....YES NO

   - health/fitness.....YES NO

   - retirement/pension.....YES NO

Continued on next page

5. (continued)

- company policies/operations.....YES NO
- academic courses.....YES NO
- technology oriented training.....YES NO

	ALWAYS	SOMETIMES	RARELY	NEVER	DON'T KNOW
6. Your corporate training and development department does an assessment to find out how well employees perform at their jobs and/or apply what they know to the job.	5	4	3	2	1
7. Your corporate training and development department provides opportunities for individual choices in topics, learning experiences, etc.	5	4	3	2	1
8. Your corporate training and development department trains employees how to develop skills in self-assessment.	5	4	3	2	1
9. Your corporation training and development department employs					
- a range of teaching styles	5	4	3	2	1
- conscious-raising techniques	5	4	3	2	1
10. Your corporate training and development department assesses employees' prior learning experiences.	5	4	3	2	1
11. Your corporate training and development department assesses employees' past working experiences.	5	4	3	2	1

Continued on next page

	VERY OFTEN	OFTEN	SOMETIMES	RARELY	DON'T KNOW
12. How often does your corporate training and development department					
- provides opportunities for employees to share personal experiences among each other.	5	4	3	2	1
- provides opportunities for employees to reflect on learning experiences.	5	4	3	2	1
- provides opportunities for employees to organize support groups in order to solve immediate problems.	5	4	3	2	1
- provide opportunities for employees to have a one-on-one relationship with trainers.	5	4	3	2	1
- develops employees' skills in problem-solving.	5	4	3	2	1
- offers a range of learning options and flexibility in where, when, why, and how learning takes place.	5	4	3	2	1
- engages employees in formulating and clarifying educational and career life goals.	5	4	3	2	1

Continued on next page

	GREAT	CONSIDERABLE	SOME	LITTLE	DON'T KNOW
13. To what extent does your corporate training and development department					
- allows employees to pose questions to what they want to learn.	5	4	3	2	1
- allows employees to outline the plan of action.	5	4	3	2	1
- allows employees to evaluate their progress and competencies.	5	4	3	2	1
- offers various learning activities with particular reference to employees' previous expeirences.	5	4	3	2	1
- utilizes employees as a resource for planning and designing training for other employees.	5	4	3	2	1
14. To what extent do trainers initiate the learning then relinquish the learning responsibilities to the employees.	5	4	3	2	1
15. To what extent do trainers adopt the role of a resource person in order to help employees identify resources for their learning.	5	4	3	2	1
16. To what extent is the pace of the learning activity under the control of the individual learner.	5	4	3	2	1

Continued on next page

	GREAT	CONSIDERABLE	SOME	LITTLE	DON'KNOW
17. To wha extent is there a mutual diagnosis of employees' skills/needs between trainer and employee.	5	4	3	2	1
18. To what extent are learning outcomes evaluated.	5	4	3	2	1

19. To what extent are these practices employed by your corporate training and development department?

	GREAT	CONSIDERABLE	SOME	LITTLE	DON'T KNOW
- learning contracts	5	4	3	2	1
- individualized learning	5	4	3	2	1
- reflective exercises	5	4	3	2	1
- hypothetical exercise	5	4	3	2	1
- simulation	5	4	3	2	1
- case studies	5	4	3	2	1
- video	5	4	3	2	1
- lecture	5	4	3	2	1
- television	5	4	3	2	1
- discussion	5	4	3	2	1
- t-groups	5	4	3	2	1
- internships/ apprenticeship	5	4	3	2	1
- computer	5	4	3	2	1
- games	5	4	3	2	1
- roleplays	5	4	3	2	1

Continued on next page

	GREAT	CONSIDERABLE	SOME	LITTLE	DON'T KNOW
- brainstorming	5	4	3	2	1
- demonstration	5	4	3	2	1
- field trips	5	4	3	2	1
- note-taking	5	4	3	2	1
- question/answer sessions	5	4	3	2	1
- reading	5	4	3	2	1
- fishbowl	5	4	3	2	1
- small group work	5	4	3	2	1

20. To what degree of effectiveness are each the following methods which have been used in the training seminars you've attended?

	VERY EFFECTIVE	QUITE EFFECTIVE	SOMEWHAT EFFECTIVE	NOT EFFECTIVE	DON'T KNOW
- lecture	5	4	3	2	1
- discussion	5	4	3	2	1
- case studies	5	4	3	2	1
- small group work	5	4	3	2	1
- videodisk cassette	5	4	3	2	1
- individual instruction	5	4	3	2	1
- computer instruction	5	4	3	2	1
- simulation	5	4	3	2	1
- games	5	4	3	2	1
- internships/ apprenticeships	5	4	3	2	1
- reflective exercise	5	4	3	2	1

Continued on next page

	VERY EFFECTIVE	QUITE EFFECTIVE	SOMEWHAT EFFECTIVE	NOT EFFECTIVE	DON'T KNOW
- demonstrations	5	4	3	2	1
- field trips	5	4	3	2	1
- hypothetical exercise	5	4	3	2	1
- television	5	4	3	2	1
- roleplays	5	4	3	2	1
- t-groups	5	4	3	2	1
- fishbowl	5	4	3	2	1
- brainstorming	5	4	3	2	1
- note-taking	5	4	3	2	1
- structured discussion	5	4	3	2	1
- panel discussion	5	4	3	2	1
- question/answer session	5	4	3	2	1
- reading	5	4	3	2	1

21. To what degree of effectiveness are each of the following media resources?

	VERY EFFECTIVE	QUITE EFFECTIVE	SOMEWHAT EFFECTIVE	NOT EFFECTIVE	DON'T KNOW
- overhead projector	5	4	3	2	1
- audio tape	5	4	3	2	1
- slide/sound presentation	5	4	3	2	1
- hand-outs	5	4	3	2	1
- 35mm film	5	4	3	2	1
- newsprint	5	4	3	2	1

Continued on next page.

	VERY EFFECTIVE	QUITE EFFECTIVE	SOMEWHAT EFFECTIVE	NOT EFFECTIVE	DON'T KNOW
- chalkboard	5	4	3	2	1
- simulators	5	4	3	2	1
- models	5	4	3	2	1
- flannelboard	5	4	3	2	1

22. To what extent does your corporate training and development train their recruiters?

GREAT CONSIDERABLE SOME LITTLE DON'T KNOW

23. Please list any other activities your training department conducts which you find very effective.

_____

_____

_____

THANK YOU FOR TAKING TIME TO COMPLETE THE SURVEY

APPENDIX B

Ten Adult Learning Principles

The major point to keep in mind in adult learning is that the approach to learning must take into consideration the characteristics of the learner. The specific principles include:

- adults are pragmatic learners.
- a goal of the adult educator is to enable adults to become more self-directed learners.
- adults are problem-solvers.
- adults use their experiences as a guide in their choice of learning activities.
- adults learn best when they are actively involved in planning and evaluating the learning process.
- adults learn best when there is a good match between the teaching method and their learning style.
- adults have prior learning experiences that should be taken into account when designing learning or education.
- adults learn best when they proceed at their own pace.
- development of self-evaluation skills is important in becoming a more effective adult learner.

Continued on next page

- the highest goal to which an adult educator can aspire is to make adults aware of the role of psychological, social and cultural factors in self-development; and, learn that this knowledge can be used towards their own adult growth and development.

APPENDIX C

Principles and Questions

Adults are pragmatic learners.

1. Your corporate training and development department offers workshops/seminars dealing with...

   - career development
   - child care
   - budgeting your money
   - how to fix/work _____
   - aging/death
   - job specify training
   - health/fitness
   - retirement/pension
   - company policies/operations
   - academic courses
   - technology oriented training

2. Your corporate training and development department does an assessment to find out what employees need to know in order to be successful at their...

   - job
   - home/family

3. Your corporate training and development department incorporates self-assessment techniques for employees to identify skills they need to develop in order to be successful at their jobs.

4. Your corporate training and development department teaches employees...

   - goal setting
   - value clarification
   - self-assessment techniques

5. Your corporate training and development department engages employees in formulating and clarifying educational and career-life goals.

6. Your corporate training and development department provides opportunities for...

   - employees to share personal experiences among each other
   - employees to reflect on learning experiences

Continued on next page.

A goal of the adult educator is to enable adults to become more self-directed learners.

1. In your corporate training and development department, to what extent are these practices employed...

   - learning contracts
   - individualize learning

2. In your corporate training and development department, to what extent do employees pose questions to what they want to learn, outline the plan of action, and evaluate their progress and competencies.

3. In your corporate training and development department, to what extent do trainers initiate the learning then relinquish the learning responsibilities to the employees.

4. In your corporate training and development department, to what extent do trainers adopt the role of a resource person in order to help employees identify materials, resources for their learning.

5. Your corporate training and development department provides opportunities for...

   - employees to evaluate their own learning
   - employees to set goals to achieve learning objectives
   - employees to evaluate their own learning

6. Your corporate training and development department offers a range of learning options and flexibility in where, when, why, and how learning takes place.

Adults are problem-solvers.

1. Your corporate training and development department provides opportunities for...

   - employees to organize support groups in order to solve immediate problems

   - employees to have a one-on-one relationship with trainers

Continued on next page.

2. In your corporate training and development department, to what extent are these practices employed...

   - reflective exercises
   - hypothetical exercises
   - simulation games
   - case studies

3. Your corporate training and development department provides opportunities for analysis and practice which are then evaluated by employees and/or trainers.

4. Your corporate training and development department develops employees' skills in problem-solving.

5. Your corporate training and development department selects problems for practice that pertain to real life situations.

Adults use their experiences as a guide in their choice of learning activities.

1. Your corporate training and development department provides opportunities for individual choices in topics, learning experiences, etc.

2. Your corporate training and development department offers various learning activities with particular reference to employees' previous experiences, etc.

3. Your corporate training and development department offers experiential techniques for self-diagnosis.

4. Your corporate training and development department teaches self-assessment skills.

5. Your corporate training and development department utilizes employees as resources for each other.

Adults learn best when they are actively involved in planning and evaluating the learning process.

1. Your corporate training and development department utilizes employees as a resource for planning and designing training for employees.

Continued on next page.

Adult learn best when there is a good match between the teaching method and their learning style.

1. In your corporate training and development department, to what extent are these practices employed:

   - video
   - television
   - print
   - computer
   - case studies
   - lecture
   - discussion
   - experiential
   - simulation games

2. Your corporate training and development department offers:

   - diverse curriculum
   - course alternatives
   - extra curricular activities
   - different learning activities

3. Your corporate training and development department employs a range of teaching styles.

Adults have prior learning experiences that should be taken into account when designing learning or education.

1. Your corporate training and development department offers experiential techniques for self-diagnosis.

2. Your corporate training and development department assess employees' prior learning experiences.

Adults learn best when they proceed at their own pace.

1. In your corporate training and development department, to what extent is the pace of the learning activity under the control of the learner.

The development of self-evaluation skills is important in becoming a more effective adult learner.

1. In your corporate training and development department, to what extent is there a mutual diagnosis of employees' skills/needs between trainer and employee.

2. In your corporate training and development department, to what extent are learning outcomes evaluated.

The highest goal to which an adult educator can aspire is to make adults aware of the role of psychological, social and cultural factors in self-development; and, learn that this knowledge can be used towards their own adult growth and development.

1. Your corporate training and development department employs conscious-raising techniques.

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