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AUTHOR Carlson, Richard E.
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ABSTRACT

The study investigated the effects of an inservice teacher-training workshop in achievement motivation and career cluster simulations on career decision-making skills for junior high students. Ninety-three teachers and counselors from 30 schools, representing all areas of Washington, D. C., participated in the two-week inservice career education workshop. Sample control and experimental student groups, randomly selected from the participating schools, were established at seven of the schools. The student population was predominantly black with 50 percent qualifying for educational aid for the disadvantaged. Career simulations were used with each experimental group while each control group was conducted with the visual format; both groups in each school were conducted by the same teacher. Residual effects on students were measured by the results of pretesting (October 1972) and posttesting (January 1973) using Crites Vocational Development Inventory. Statistically significant differences between experimental and control groups were indicated in five of the seven schools; teachers participating in the workshop were able to produce "positive change" in student vocational maturity scores. Workshop participants viewed the workshop positively and reported followup implementation in career simulations. A 15-page related literature review and a 14-page appendix (workshop evaluation) are included. (EA)

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A CAREER EDUCATION MODEL

RESEARCH PROJECT IN ACHIEVEMENT MOTIVATION
FOR JUNIOR HIGH SCHOOL TEACHERS

James T. Guines, Acting Deputy Superintendent
Instructional Services

Paul E. Cawein, Assistant Superintendent
Division of Career Development Programs

Washington, D.C.

July 1973

U.S. DEPARTMENT OF HEALTH,
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A C A R E E R E D U C A T I O N M O D E L
Research Project in Achievement Motivation
for Junior High School Teachers

RICHARD E. CARLSON
Principal Investigator

ELAINE C. MELMED
Program Coordinator
Metropolitan Educational Council for Staff Development
Washington, D.C.

This report prepared by Metropolitan Educational Council for Staff Development under contract with District of Columbia Public Schools, Division of Career Development Programs, under provision of Part C, Research, Vocational Education Amendments of 1968.

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DOCUMENT RESUME

BACKGROUND

The plight of "turned-off" school children is serious. Attrition, violence, and low achievement verify student disenchantment. Schools tend to contribute to the situation by their limited commitment to the goals and career development of their students

OVERVIEW

The major purpose of this research was to determine if in-service career education training for teachers had any positive residual effect for students. Ninety-three participants, representing thirty schools in the District of Columbia, attended the two week career education workshop. The training consisted of achievement motivation and career cluster simulations. A training manual was prepared for the participants prior to the workshop. It included exercises in:

- Forced learning and goal setting.
- Decision and career planning.
- Self-assessment and taking responsibility.
- Working and helping relationships.
- Vocations and self-concepts.

DESIGN

The sample was selected by seven schools which were randomly selected from the participating thirty. The sample included 154 in the treatment group and 175 in the control for a total group of 329. Treatment incorporated into the regular

curriculum lasted one school term. Students were pre-tested with Vocational Development Inventory prior to treatment and post-tested at the conclusion of the school term. The VDI was constructed from theories of vocational development to measure attitudes which are salient to decision-making.

In addition to the VDI, open-ended questionnaires were utilized with the faculty at the conclusion of the workshop. The questionnaire was designed to assist in the assessment of the workshop in terms of design, materials and teacher satisfaction. The questionnaire was collected two months after the workshop in an effort to more adequately reflect long term feelings of participants. A third strategy of evaluation was via the "Log Sheet" kept by project schools which was, in effect, a record of exercises that faculty used with students and with other school staff.

RESULTS & CONCLUSIONS

There were statistically significant differences between treatment and control students in five of the seven schools, thus teachers who participated in the two week career education workshop were able to produce "positive change" in the vocational maturity scores of students.

The study also concluded that participants viewed the workshop very positively and that according to follow-up tapes and teacher logs, career simulations were being implemented with students and peer faculty at all of the schools.

The model represents an intervention process geared to the curricular motives of both teachers and students. The study presents evidence that a career education workshop for regular school faculty can have immediate payoff for the total school community. This study might assist school districts which are trying to develop "delivery systems" for their career education programs. It is also recommended that this intervention model be replicated in other school districts.

PREFACE

In each high school classroom, the school loudspeaker was blaring. An assistant principal read the names of those students who were to report to Mr. Conway for detention that afternoon. Next came an announcement that students who had signed up for the "Career Education Workshop" were to report to the library to take some tests.

As students roared down the halls a casual comment from one teacher to another could be heard. "Career education, it sounds like a sure cure for insomnia. The kids get ripped off once again with more promises that lead nowhere." The noise level prevented my hearing the reply, but I felt it unfortunate that he viewed new programs in that light. Perhaps the students felt the same way.

Two hundred students had volunteered to be part of the research project by getting their parents to sign permission slips-- to be away from school for a whole week. From this group, one hundred students were randomly selected to be in the experimental group and now they were all in the library. I asked the group what they thought the workshop would be like and the reply, though comical, was also

somewhat depressing.... "We'll see lots of movies and hear those inspirational talks about getting to work on time." "Why would you take a whole week off to do that," I asked. A few chuckles coupled with, "why not?" was the immediate reply. I then asked one of the fellows, who seemed to be taking the leadership role, if he felt that there would be any real payoff for his spending a week out of school. With obvious seriousness, he said, "I'll be one week closer to getting the hell out of school." There was a chorus of "right-ons," but, fortunately for me, the immediate pre-testing activities kept me too busy to become overly apprehensive.

One of the teachers in the group suggested that I shouldn't be too surprised if half the students didn't show up the second day. "They will use your program just to get out of school," he warned.

Thus began an exciting educational innovation, Career Awareness Training. The Career Awareness Training workshop was an educational intervention in decision-making and human growth skills for students in the District of Columbia public schools. The actual training occupied one full week and was de-

signed to stimulate the vocational maturity of students. The idea for this program was based upon several years of work with urban centers, (inner city and vocationally oriented centers for high school dropouts) and upon experience with student orientation programs at several colleges. It also seemed logical that exercises designed around life-like problem solving situations could, in fact, have value for students while they were still in school.

Achievement motivation exercises were the basis for these experiences. Many of the learning goals of achievement motivation are similar to the maturational stages theorized by Super (1954, 1957, 1963) and Tuckman (1970). They also relate to these decision-making processes that stimulate awareness within a person that he, himself, is the active agent in determining the direction of his educational and vocational path, (McClelland (1961, 1969) and Alschuler, (1970).

In January of 1972, professional trainers conducted the workshop with students randomly selected from four schools in the District of Columbia. Since the examination of researchable hypotheses was an original intent of the program, suitable provisions were made for this research. The project conclusive-

ly demonstrated that vocational maturity can indeed be increased through the use of achievement motivation techniques.

* * *

If the techniques of achievement motivation could lead to a significant increase in the vocational maturity of high school students, it seemed logical that both teachers and counselors could be given training which would enable them to achieve similar results.

This report is a detailed description of that attempt. The reader is asked to consider the results of this work in terms of its potential for a local curricular delivery system for career education.

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CHAPTER I

INTRODUCTION

Many serious problems confront American education today. Its basic value is questioned by our youth as they experience the dichotomy between the requirements of our educational institutions and the demands of the world of work. The resulting frustrations are often seen in the form of riots, bombings, school violence, drug abuse, increased attrition and generally low school achievement. Viewed dispassionately, it would seem that educational institutions, unlike competitive enterprises, seem to succeed by: failing to improve, failing to update programs and by failing to provide relevant training for students.

The National Council on Vocational Education also concludes that educational leaders are not realistically addressing the student needs of post-industrial society. They say:

The violence that wracks our cities has its roots in unemployment and unequal opportunity. Those who have no jobs in an affluent community lash out in anger and frustration. Racial unrest, violence, and the unemployment of youth have their roots in inadequate

education.
(Annual Report, 1969)

As man orders his world through the use of his new technological skills, molding it to suit his will, his children are still lock-stepped into training for obsolescence: training which fosters little, save disenchantment.

Governor Rhodes (1970) has stated that "our public schools must radically change or be bypassed as a significant factor in the development of our nation". He suggests that during the decade of the '60s we witnessed an explosion that rocked virtually all of the major cities. That explosion was, of course, projected by Dr. James Conant as far back as 1961. His major thesis, of course, was that when social and economic problems limit people from participating in the sort of life portrayed on television, they tend toward negative behavior. The Governor cites the following statistics from his home state as evidence of the broad scope of the problem:

1. There are 30,000 dropouts and forceouts a year. Every five years this adds at least 150,000 untrained, unskilled and largely unemployable persons to the state's labor market.
2. Eighty-three percent of the unemployed in Ohio are under thirty-five years of age.

3. Fifty percent of unemployed did not finish high school.
 4. Nearly fifty percent complete high school, but are still unable to find work.
 5. Of Ohio's unemployed young, twenty-eight percent have never had a job.
- From a report by the Governor's Task Force on Vocational and Technical Education - January, 1969

One of the most vigorous proponents of reordered educational priorities was the United States Commissioner of Education, Dr. Sidney P. Marland. In many of his addresses he discussed the need for relevance, the need for accountability, and the need to redesign school programs so that all students would have the skills which enabled them to qualify for immediate employment or skills which permitted them to continue their education beyond high school.

Dr. Marland focused the educational community's attention on the need for career education. He felt that career education would provide increased relevance for the educational system as it revolutionized both curriculum and teaching methods.

Marland was not alone in this contention, as Bowman and Klopff suggest in their book, New Careers and Roles in the American School:

Recent manifestations of physical violence and verbal protest give tangible evidence that many segments of the population are dissatisfied with their role and status in the economic and social fabric of society. Many hold the school chiefly responsible for the current unrest and strife through its failure to respond to the changing ethos and to the insistent demand for true equality of opportunity. Further, they contend that the school has given inadequate response to the shifting vocational scene and the demands of advance technology. Change, they say, is evident in all facets of evolving life except the organization, personnel and process of the American school; The school's relationship to the community, its design and structure, its staff and people are not in pace with the expectation of the new community. (1968)

The vocational skills suggested by such individuals as Commissioner Marland, Governor Rhodes and many other educational leaders are not those normally stressed in the school curriculum. In fact, most high school students aren't even aware of the factors that will generally control entry into a given job market.

One of the major problems encountered in any attempt to transmit career education to students is the difficulty of moving the theory into practice. One suitable approach might be through the use of decision making mechanisms.

Schools have long recognized the need for curriculum programs in the area of decision making as was noted by The Association for Supervision and Curriculum

Development, (1962).

We have based our form of government on the belief that people, utilizing their best potentialities to face up to problems, are completely capable of exercising their own government. That is, for making decisions which are in the best interests of the total population. The school then, which takes seriously its commitment to the fullest development of its people, must facilitate this process.

The use of decision-making as the basic framework for the Career Education Workshop is by no means accidental. Both a theory and actual classroom methods, for teaching the process to adolescents, have been proposed by guidance counselors.

Vocational psychologists indicate that the decision-making apparatus is probably most beneficial to an individual during his adolescent stage. (Super, 1961). Super, along with Sprinthall and Tiedeman, (1966) indicates that vocational maturity is an internal planning process, not related to the quantity of specific information one has concerning a vocation. He suggests that an individual career development is a product of choice making executed after a series of earlier decisions. This can be extended to mean that an individual matures along a continuum of career decision-making.

STATEMENT OF THE PROBLEM

Schools have generally not utilized decision-making theory as a way to assist each student's own career development. Even when some provision is made for career education, the classroom teacher is rarely involved. The potential benefit, in terms of student career maturity, to be derived from an attempt to train teachers in the methods and techniques of career education is the major focus of this study. Specifically, we are concerned with the determination of whether or not positive changes in career decision skills can be achieved within students as a result of a teacher-training workshop. That is, can carefully planned teacher training lead to residual career decision-making skills for students?

HYPOTHESES

The residual effects of the Faculty-Staff Career Awareness Training Workshop will be demonstrated if the following hypotheses hold:

Hypotheses 1. There will be statistically significant differences, between students who have been exposed to career awareness exercises and those who have not been exposed to such exercises, in the degree of vocational decision-making attitudes evidenced by the Crites Vocational Development Inventory.

Hypotheses 2. Faculty who have been involved in the summer workshop will anonymously assess the experience in positive terms at the conclusion of the two week program. (See the open ended survey appendix.).

Hypothesis 3. Faculty who have been involved in the training will become more involved in student activities geared to career development learning strategies, as

recorded in their logs and as indicated during bi-monthly meetings.

Hypothesis 4. Faculty involved in the training will stimulate further staff training at their "home" schools as indicated in their written reports and as seen through other pertinent sources.

RATIONALE FOR THE HYPOTHESES

There were several bases for the above hypotheses. We had evidence of previous research in-district with career awareness models which demonstrated the feasibility of attempts to increase the vocational maturity attitudes of students. We also had a good number of validated studies on both achievement motivation and simulations which suggested that the workshop goals were possible. The author of this report had spent several years training both secondary and college faculty members in both humanistic and career orientation techniques and-- while this work is not validated-- positive changes within the participants were apparent.

Bruner (1960) indicates that learning is multiplied when the workshop trian-ers have identified the structure of the subject matter to be taught. This goal was realized not only through content analysis of past career workshops, but by careful planning and curriculum development prior to the actual workshop.

Smith (1964, 1967) states that the quality of instruction is increased when teachers improve their performance. One of the techniques used to enhance the

quality of instruction was an emphasis on the use of a "methods" approach in teaching the workshop exercises. Teachers first engaged in the career awareness simulations; then they were required to conduct similiar exercises with their peers. The training process also included the use of videotape feedback. Through this technique participants can view themselves and their colleagues during the course of a workshop. Teachers were encouraged to evaluate the videotapes in terms of the amount of learning which seemed to be going on in the classroom.

It seems logical that the inputs designed for the workshop provided an opportunity for directed change. The learning goals of the workshop were achieved through the use of simulation exercises which offered participants problem-solving experiences directly related to their work.

In summary, both prior studies and personal experience indicate the practicability of using an intervention approach to achieve the goal of career awareness in our schools. The author cannot help but feel that if a real career education program is to be initiated by the schools, teachers must take the major responsibility for its design and implementation.

SIGNIFICANCE OF THE STUDY

Several developments--on both the State and Federal levels--signify an increased role for career education within our public schools. In fact, many of these developments make it necessary for teachers to carefully reexamine their assumptions about the teaching/learning process. Teachers are being asked to assist in the career development of youth; to pay greater attention to attitudes, the decision-making process, work values and self-appraisal approaches.

Weinstein and Fantini (1971) point out that the real issues of education do not center on HOW but rather on WHY. They stress the need to help individuals function as constructive citizens in our society. A natural spinoff of this need is programs which teach students how to utilize the decision-making process in the solution of problems which confront them. This would, in turn, help them become the active agents in the determination of their own, personal career goals.

Entering an occupation through chance, quirks of fate, or the all too familiar process of being in the right place at the right time seems wasteful,

not only in terms of overall national productivity but also in terms of personal fulfillment and satisfaction for every citizen. The fact that we do not develop an orderly process of career development in the schools is quickly demonstrated by comparing employment distributions versus population distributions. It often takes many years beyond the completion of school for an individual to find a suitable niche in the world of work. Employment, for many, is never-ending drudgery. In comparison, employment for those who have learned decision-making skills; for those who have become the active agent in determining their unique career path, is described by a number of researchers as motivating, exciting and positive (Alshuler, 1967; Kolb, 1965; McClelland 1961, 1969).

Thus, it seems likely that attempts to equip students with the tools of career decision-making may have profound effects on the individual's motivation in school.

Generally, schools are not concerned with the stimulation of an individual's motivation. They are concerned with the acquisition of certain subject matter skills and abilities, such as reasoning, English, composition, math, etc. Areas

of concern such as decision-making, taking responsibility, using feedback and researching the environment are not considered to fall within the school's domain. This grim fact leads many researchers to argue that schools tend to blunt any individual student motivation which does exist. (Murphy, 1970)

The training workshop, which this report describes, was built on the premise that the career motivation of an individual can be stimulated; that an individual can learn the process of decision-making and how this process affects him at home, at work and at school. Helping teachers to design their own career awareness exercises--to stimulate students--in any subject area really addresses the critical shortcoming of American education. The possibility of radically altering both teaching styles and outmoded theories of teaching is even more profound.

A yearly record of fifteen million high school dropouts and countless millions of graduates without salable skills dictates new directions for our schools. Meaningful change can only be a product of joint teacher/learner responsibility and motivation. Workshops which provide affective cognitive decision-

making skills can only positive affect the selection of career goals.

The literature review which follows should help the reader use the theoretical underpinnings of achievement motivation, vocational development theory and simulation in an attempt to achieve increased vocational maturity within students.

CHAPTER II

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REVIEW OF THE LITERATURE

Motivation is generally believed to be a major determinant of an individual's later success. Few surveyors of American education would argue that schools encourage and develop the natural motivation of their students. Gardner Murphy poignantly states:

Universally there is a paradox: first, the eager, vivid outreaching mind of the immature organism, the tremendous curiosity, the eagerness to make contact; then, a few years later, a loss of curiosity. (If the weather is so bad that the child doesn't have to go to school, that's a great delight. Can it be that the delight stems from the idea that it is not necessary to satisfy those curiosities and impulses to mastery? Or is school not recognizing these natural interests, turning its back on them, losing the chance to build on the child's strongest motivation?) The problem is developing the intense natural craving for knowledge and facing the fact that most cultures have managed to stifle it profoundly. Where motive was once, motive isn't any more. (1970)

One of the hardest tasks in any attempt to motivate students to make the best use of their inborn abilities is overcoming the dichotomy encountered between education for life skills and education for school (or academic) skills. Schools do not

generally allow for this connection to be made. Addressing this priority through career education was the major goal of the workshop. For this reason, this review of literature focuses on achievement motivation, vocational development and simulation theory.

Achievement motivation training is a relatively new approach to helping people understand themselves and their goals in life. The trainer attempts to develop affective approaches to teaching so that an individual's motivation is increased and his full potential achieved. Such training has been used with apparently impressive success with students, educators, and industrial executives. Many of the learning goals of achievement motivation simulation are similar to the maturational learning stages theorized by Super (1953, 1957, 1963); Ginzberg, et al (1951); Brophy (1959); Lewis (1967) and Tuckman (1970).

Ginzberg and his associates were among the first to articulate a career development theory and gather data on it. The three basic tenets of their theory are that:

Occupational choice is a developmental process which typically takes place over a period of time;

The process is largely irreversible;

The process of occupational choice ends in a compromise between interests, capacities, values and opportunities.

The Ginzberg group was concerned with how and why people choose and adjust to career occupations. Their work is of interest to this study because of the implications of developmental stages for teaching career decision-making skills.

Super (1951) theorizes that a person who expresses his vocational preference is in fact also stating the kind of person he is. In other words, choosing a career is a way for a person to implement his "self-concept." The occupation chosen serves as the vehicle which enables the individual to play that role which is appropriate for him. Super (1953, 1957, 1963) states that individuals possess a number of self-attributes-- traits and characteristics-- of which some are relevant to their vocations. According to him, selecting a vocation or course of training which offers the greatest congruence between the individual's self-attributes and his job requirements constitutes self-concept implementation. Briefly, the elements

of Super's Self-Concept Theory of Vocational Development are:

Formation of self-concept-- developing, through the process of exploration, self-differentiation and identification;

Translation of self-concept-- into occupational terms through identification, experiences and the development of awareness;

Self-concept implementation-- selecting a vocation or the specific training necessary for a vocation or career. (1963, pp. 11-14)

Achievement motivation has also been found to be related to those decision-making processes that stimulate awareness within a person that he himself can be an active agent in determining the direction of his educational and vocational behavior (McClelland, 1961, 1969) (Alschuer, 1970). Teaching career decision-making through achievement motivation simulations has exciting implications, among them that individuals can internalize the process of vocational decision-making through the use of direct educational methods.

McClelland (1955) presents the theory of achievement motivation as a social-psychological synthesis, referring to achievement oriented behavior. His theory assumes that all motives are learned and that they develop through an experiential

process of affective learning. "A motive becomes a strong affective association characterized by an anticipatory goal reaction and based on past association of certain cues with pleasure or pain." (p.226)

Maslow, (1943) in his theory of human motivation, suggests that man is a wanting animal whose goals are in a hierarchy of prepotency. As the psychological needs (goals) of safety, love, esteem, and self-actualization are encountered, they monopolize the consciousness and capacities of the organism. As they are satisfied they become less prepotent and man moves toward the goal of self-actualization. Maslow feels that discontent and restlessness develop within the individual unless he is doing what he is capable of doing. Man's hunger for self-actualization might well be his motivation.

McClelland (1958, 1961, 1965) cites data to show that an individual with a high need to achieve is more self-confident; functions through decisiveness, not chance; takes personal responsibility for decisions; sets moderate achievement goals with calculated risks; maximizes his effort by examining the environment, making more accurate long-term plans and not letting time or immediate pressures control his destiny. Such a person also has a strong concern for immediate feedback, knowledge

which indicates how well he is making decisions. There seems to be a very strong relationship between characteristics of a person with high need to achieve and the theory of self-concept implementation.

Perhaps simulations in achievement motivation could be the mechanism to help individuals implement elements of vocational self-concept theory. Lewis (1967) tends to substantiate Super's self-concept implementation theory. He also found significant tendencies for those who indicated that they have implemented their vocational self-concept to be rated higher by their direct supervisors.

Brophy (1959) found that the more congruence there is between the self-concept and the occupational choice, the greater individual job satisfaction is. Oppenheimer (1966) showed that people prefer occupations perceived to be congruent with their self-concepts. Tageson (1960) found positive and significant relationships between the harmony of self and occupational role concepts.

Torrance, (1951, 1954) using self-concept data in counseling, concluded that students in his study at Kansas State College lacked the ability to evaluate their potential accurately and therefore set unrealistic goals. Knowledge of both self and role requirements, within the self-concept implementation stage, had not been

developed by the students.

Tiedeman and O'Hara (1963) describe career development as a series of sequential life stages or events. The individual's meaning is in congruence with society's meaning. The major emphasis of their study was the career decision-making process. They feel that a career decision is divided into two periods:

Anticipation-- includes exploration, crystallization, choice and specification.

Implementation and adjustment-- includes induction (discovery explanation), transition (relevance for goal) and maintenance of goal.

Tiedman and O'Hara generally agree with the Self-Concept Theory postulated by Super, but they have also substantiated its maturational aspects.

Wrenn (1959) and Holland (1959) expressed some concern about the utility of Super's self-concept theory, because they felt that the theory was too general to be researched and tested. Crites, however, (1969, p.2) feels that the developmental aspects of career theory can now be measured accurately. He supports the career choice theory: "We have a fairly comprehensive conceptual framework of the stages through which an individual supposedly passes in arriving at a (career) choice".

Tuckman (1970) presents evidence that the level of incorporation of occupational

concepts (career development described as self-concept by Super) is significantly increased when students are involved in occupationally oriented programs in two-year colleges.

An understanding of the developmental and decision-making dimensions of vocational development is important in considering its use together with achievement motivation theory. McClelland (1962, p. 146), reflecting upon his achievement motivation research states that it has taught him, "that men can shape their own destiny; that external difficulties and pressures are not nearly so important in shaping history as some people have argued; it is how people respond to those challenges that matter, and how they respond depends on how strong their concern for achievement is."

McClelland (1961) offered a rationale for the development of advanced economic growth in the United States. According to him, a new sort of person emerged, one who learned to be a high achiever through societal or parental pressures. He cites Weber's hypothesis that the Calvinist doctrine and its emphasis on individual excellence helped establish achievement motivation as a rationalization for life, in such people. Winterbottom (1953) demonstrated the validity of Weber's hypothesis in a study of mothers with high and low achieving children. The training received.

by the high achieving children tended to correspond to the value structure of the Calvinistic doctrine of self-reliance and rugged individualism.

Burris (1958) reports in his unpublished dissertation that he taught achievement thinking to students based on their achievement imagery. He found that the students not only learned achievement thinking, but showed significant increases in their grade point averages when compared with a control group. McClelland (1961, pp. 417-18) suggested that working with a person's fantasies might be the most direct way to increase his achievement motivation. He shifted from an exploration of the social origins and economic consequences of achievement motivation to a study of how an individual's motivation could be increased. The feeling that motivation could be increased through conscious effort led McClelland (1965) and Lasker (1966) to design achievement courses. These courses were taught in many parts of the world and resulted in significant behavioral changes in businessmen who participated. Previously, psychologists believed in predestination. That is, what happens early in life determines the personality characteristics of an adult. Only extensive reconstruction of early childhood dynamics through psychoanalysis was considered to be effective in promoting adult behavioral change. McClelland's

(1965, pp. 6-8) data showed that over sixty percent of the men involved in the course became unusually (and observably) active in business after participation. Such things as starting new businesses, making more profit or being more innovative, were taken as indications of greater activity. Lasker (1966) found that forty-seven percent of the participants showed higher levels of activity, compared to a fourteen percent increase in the two years preceeding the achievement motivation course.

Kolb (1965) conducted achievement motivation exercises for twenty intellectually competent, but underachieving students who were enrolled in a summer enrichment program at Brown University during 1961. A matched control group was also studied along with the experimental group. A follow-up study showed that the grades of both the experimental and control groups improved during the first semester after the course, but grades of both the control and the experimental group students who were characterized as lower-class returned to pre-program levels after one year. The grades for the middle class experimental students not only improved after one year, but were still continuing to improve one-and-one-half years after the training.

Aronoff, et. al., (1965) investigated the possible cultural factors responsible for the failure of Kolb's work with lower-class students. This study led to the

revision of some materials and the creation of new exercises and games. It also led to speculation that perhaps achievement motivation training was ineffective because students did not consider doing well in school to be a relevant goal.

McClelland and Winter (1969), in a three year follow-up report on the impact of a series of achievement motivation courses given to businessmen, conclude that the training stimulated more entrepreneurial activity than could be accounted for by normal maturation or currently used executive training programs. They also identify the specific inputs (course content) they consider important for long-term change. The following were found to be effective:

Exercises which taught the thought and action motivation.

Procedures which provided the mechanism for affective and cognitive support for the specific change a person desired.

Procedures to help individuals focus on making careful long-term plans (goals).

Clayton (1965) and McClelland (1966) show evidence that the level of achievement motivation within an individual can serve as a prediction of success. In other words, people who test high in level of achievement motivation usually have the ability to make realistic short and long term career decisions. Morris (1966) also presents

evidence that individuals with high levels of resultant motivation will pick careers suited to their talents, while individuals with low levels of resultant motivation will make unrealistic career choices, regardless of their measured intelligence. Parks (1968) found that achievement motivation can easily be adapted to the normal curriculum. He found that the use of achievement exercises in academic content areas was effective in promoting better grades in courses.

Rosen, (1968) after an analysis of achievement motivation, suggested that one of the major components of achievement-oriented behavior was occupational aspiration. Students learn to distinguish the more prestigious occupations from those commonly found in the general culture early in life. He also found that most work attitudes are formed before guidance programs can have any impact. His work suggests reorganizing the curriculum so that it pertains to the interests and the needs of youth. He asks, "Why shouldn't the system of vocational education begin when the child is first exposed to the organized educational process?"

Alschuler (1968) feels that any learning situation can be viewed as a game with goals, rules and teams of players. He presents a taxonomy of games which may be used to diagnose the motivational demands of learning situations and to select games or simulations to teach achievement motivation.

Simulation techniques have been effective in training military personnel (McClelland, 1970). In a recent article McClelland asks the question, "Simulation, can it benefit Vocational Education?" (1970, p.23) He suggests the answers may be found in an examination of the research about training programs used with the armed forces. He feels that vocational educators are unnecessarily reticent about the use of simulation techniques in the classroom.

There has been little, if any, experimental research directed toward the deliberate stimulation of vocational exploration and decision-making (Johnson, 1968). Resnick (1970) designed a simulation which teaches students to learn strategies. It incorporates competition, involvement, and other interest characteristics. Krumboltz (1967) directed occupational simulations and tested them experimentally with the cooperation of over one thousand high school students. The students experienced such occupations as salesman, laboratory technician, x-ray technician and others. They "performed" the necessary task via simulation. The research findings show that the simulations did, in fact, increase interest in occupations and in learning more about them.

The Center for Vocational and Technical Education at Ohio State University has developed simulation training packets (Supervision and Decision-Making Skills

in Vocational Education). The objective of the simulation training is to provide realistic exercises which are as similar as possible to actual events. The simulations used included "in-basket/out basket" and role play techniques. Meckley (1970) suggests that simulation is an effective technique for training pre- and in-service staff. He states, "Through simulation, the student not only learns the content and functions of his field of specialty; he also learns a lot about himself."

Guetzkow (1962) was one of the earliest researchers to use simulation games for the purposes of research. He notes that individuals who participate in simulation games take that participation very seriously. Guetzkow, et. al. (1963, p. 13), Driver (1962) and Alschuler (1970) give evidence that the size of the reward has little bearing on the degree of involvement with the simulation.

The American Management Association is a group which specializes in training top executives in decision-making processes through the use of simulation. Snyder (1962) feels that there are theoretical challenges in the validation of simulation experiences, however the experiences can be repeated (using different criteria) to test out alternatives which were not chosen by students. Pool and Abelson (1962)

feel that the need in research, for the simulation to be close to reality makes it possible for so many variables to enter into the study that it is difficult to control.

While simulation training is relatively new, both in research and in the teaching of psychological concepts in career decision-making, there seems to be great acceptance of its merits.

* * *

In summary, this review has attempted to:

40

Examine achievement motivation theory (focusing on those studies which relate to decision-making and self-concept formation).

Review relevant career development theories in order to identify the maturational processes of vocational development.

Identify, through simulations, those possible delivery mechanisms which are suited to the classroom teaching process.

CHAPTER III

PROCEDURES

Overview

The purpose of this research was to determine whether teachers and counselors could, after intensive in-service training in career awareness simulations, transfer the training to students-- with positive results. The residual effect with students was measured by a vocational maturity attitude scale. The exercises were designed to teach those skills and attitudes which seem to allow the maximum development of an individual's potential for defining and achieving personal goals. Specifically, the training taught the student to take moderate risks, rather than great risks or none at all; to plan ahead; to think in terms of goals, successes and trust and to rely on others when this is appropriate.

Sample

Ninety-three participants, representing thirty schools in the District of Columbia, attended the two week in-service career education workshop. Each school was represented by a volunteer teacher/counselor team. They were selected after the project coordinator had visited the participating schools to explain the program. These visits also permitted an informal assessment of organization character-

istics, including patterns of communication and interaction. This proved important in the design of the simulations to be used and in the selection of an overall approach. The planning phase of the workshop took quite some time.

While the faculty who participated were random representatives from the participating schools, most of the trainers felt that the group was of higher caliber than many similarly selected groups they had led. The participants ranged in age from twenty-three to sixty with an estimated average age of thirty-eight. Teaching experienced varied considerably, but most had at least ten years of experience at two or more schools. Several also held administrative positions related to pupil personnel services.

Every area of Washington, D. C. was represented, even though the workshop was held during the severe tropical storms of June, 1972. Many of the workshop participants were up much of the night trying to contain the flooding, but at 8:45 each morning they were set to continue the workshop. The interest and commitment was phenomenal.

The major goal of the study was to determine if in-service career education training for teachers had any positive residual effect for students. To do this,

sample control and treatment groups were established at seven of the schools. These were randomly selected from the thirty participating schools.

At each of the seven schools, participating faculty designated one of their classes as the treatment group and another as the control group. This assignment was made after pre-testing had been completed. The teacher/counselor used career simulations with the treatment group, but with the other group he would teach using his previous format and materials. In all cases one person taught both classes. Testing was done by a second member of the school's workshop team, while a third member of the team met with the teacher to assure that the treatment was uniform and that bias was kept to a minimum. All team members shared the responsibility for compliance with the research design.

A sample population of 329 students was identified with 154 in the treatment group and 175 in the control group. The post-test was administered four months after the pre-test.

The student population was virtually all black. According to census data about fifty percent qualified for supplemental funding under Public Law 90-576, aid to education for the disadvantaged. Administration of the Stanford

Achievement Basic Battery, indicates that students in the District of Columbia fall far below the national means for reading and mathematics. There is no reason to believe that the student sample selected for this study does not represent the average student in the district.

The number of students in each school and in each sample group may be found in Table I.

TABLE I
NUMBER OF CASES FOR EACH SCHOOL

	Control	Experimental	Total
SCHOOL A	16	14	30
SCHOOL B	35	22	57
SCHOOL C	24	20	44
SCHOOL D	25	28	53
SCHOOL E	25	25	50
SCHOOL F	25	19	44
SCHOOL G	25	26	51

The Experimental techniques

The simulations in achievement motivation and learning strategies were conducted by eight experienced trainers, two of whom were responsible for the video feedback and critique sessions. The trainers' responsibilities ended upon completion of the two week in-service workshop, but the principal investigator continued the project and its evaluation. A training manual was prepared for the workshop participants. It included exercises in;

forced learning and goal setting
decision and career planning
working and helping relationships
trust and affiliation
vocations and self concepts.

Written assignments were given to assist participants in their own self-appraisal and career exercise development.

The forced learning and goal setting exercises, were designed to help participants develop listening and goal setting skills. They were also used to demonstrate the ease with which learning could actually be accomplished. These exercises were offered as a way to introduce students to new materials and as a way to facilitate the "joining up" process with new students.

The decision and career planning exercises were developed to help participants establish priorities effectively; recognize critical problem areas; identify informational needs and designate the actions needed to implement the decisions reached. The exercises also gave the participant a chance to view his own decision-making apparatus-- the style of decision-making used, the human factor and the method or lack of methods he utilized in dealing with information.

Much of the career in-service workshop dealt with exercises in the decision-making and career planning areas. It was felt that these two areas are of the greatest importance to any career education program.

The third area of concentration, working and helping relationships, was developed throughout the workshop. Micro exercises were used to do this. The use of small groups, such as diads and triads for intimate and critical discussion was one of the specific techniques employed.

Trust and affiliation was stressed because of our belief that teaching teams (administrators, counselors and teachers) must learn to work in a more affiliative and trusting manner. We discovered that, regardless of the excellence of any

curriculum model, implementation depends upon the trust and affiliation that staff members have for one another. Two of the exercises used were the disarmament exercise and the trust walk.

Vocations and self concepts were considered both affectively and cognitively. Super's theory was discussed to gain greater understanding of how a developmental plan might be used with students. Lecturettes and small group exercises were used for this purpose. We felt it was important that teachers understand some of the basic concepts of the vocational psychologist. In every instance, a cybernetic learning loop was used. This means; (1) initiating an experience with participants via a simulation, (2) discussion analysis of the experience, (3) tying the experience to other life or school experiences (generalizing), (4) developing or formulating combined concepts of the two, and (5) creating new generalizations based on practical actions and questions. (See Figure A)

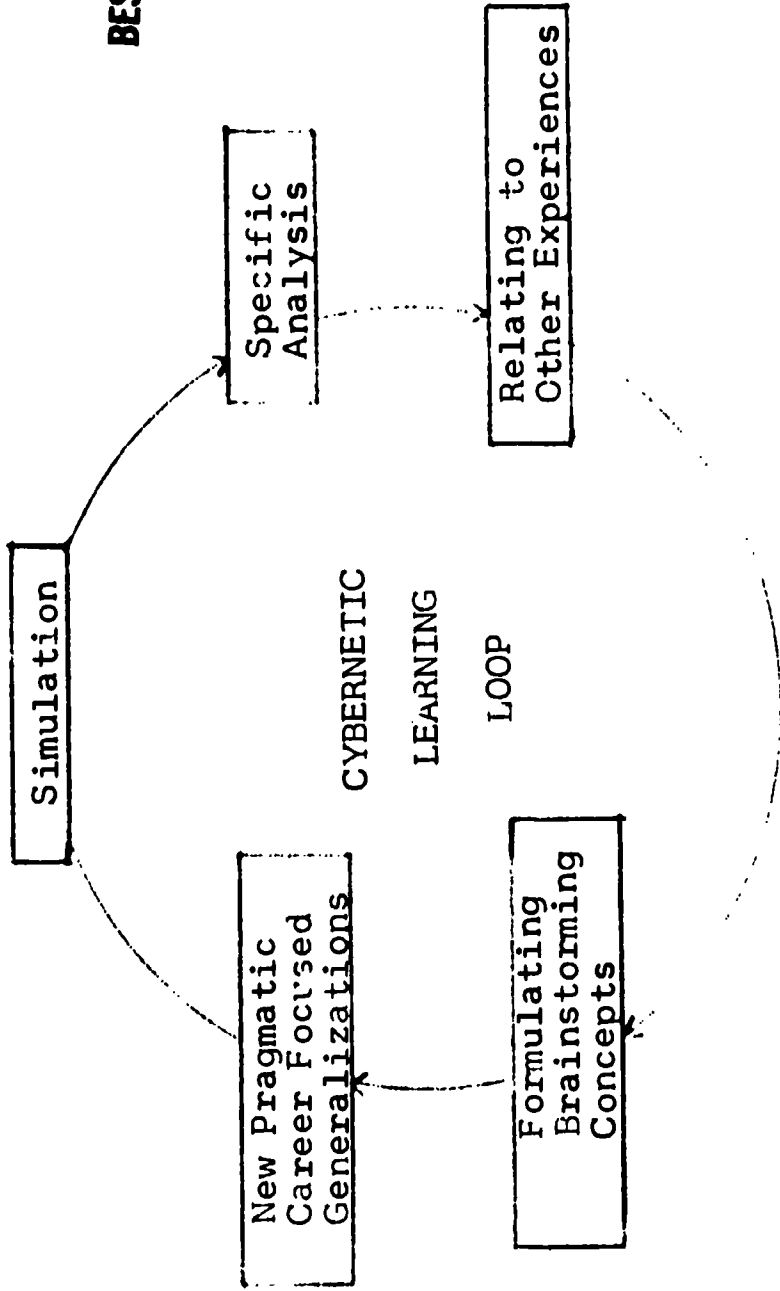


Figure A

Overall, an attempt was made to develop a methods approach to career aware-ness. This approach includes exposure to exercises that can help teacher/counselors: (1) develop achievement motivation; (2) appraise and reappraise values; (3) develop and modify attitudes toward themselves, others and career-related items (such as work, persistence and success); (4) become able to give and receive feed-back in a constructive manner; (5) develop trusting relationships; (6) become more creative and more proficient in decision-making and problem-solving and (7) become more aware of their own needs and talents.

The methods approach entails an intensive exposure to experiential career awareness techniques. The trainers lead the participants through exercises which:

Develop an awareness of their own needs, values, attitudes and perceptions.

Help the participants become "tuned into" career awareness concepts before they demonstrate them to student groups in the classroom setting.

Enable them to experience the specific exercises and the general approach themselves- an important prerequisite for trying it with students.

Develop a group, that is, exercises which

develop rapport, mutual understanding, and trust. These are necessary preconditions for subsequent aspects of the process.

Develop techniques and conditions for giving and receiving feedback. This is an important skill for both their work with students in career awareness and their subsequent developmental work in the project.

Following the workshop curriculum units were developed and used in the classroom. The participants used the skills developed during the workshop experience to work with their colleagues to develop exercises for career education in the classroom. They had been provided with a manual of exercises which formed the basis for the workshop experiences. They were free to adapt any of these experiences for use with their own classes.

The development of curriculum was a team effort. The participants shared feedback collectively and, through this method, they refined their exercises. Feedback was assisted through the use of videotape. It acted as a mirror with a memory; individuals were confronted with their behavior during the simulations.

Instrumentation

All of the 329 student participants in the study were pre-tested with the Vocational Development Inventory (Crites, 1966). This pre-testing was completed before the Career Awareness Program began in October, 1972. The post test took place at the end of January, 1973. By then, treatment had been implemented at least once during the first semester of school.

The Vocational Development Inventory (VDI) consists of fifty attitudinal statements which assess five different dispositional response tendencies in vocational choice: (1) involvement in the choice process, (2) orientation toward work, (3) independence in decision-making, (4) preference for choice factors, and (5) conceptions of the choice process. (Crites, 1969).

The five clusters were rationally deduced from vocational development theory. Crites first began collecting data on the Vocational Development Inventory in 1961. This work was conducted in Cedar Rapids, Iowa (Crites 1965). Between 1961 and 1966, two hundred studies of the VDI had been conducted with students ranging from seventh to twelfth grade.

Psychometric Characteristics of the Vocation Development Inventory have been summarized (Crites, 1969, pp. 89-95). The VDI was standardized on grades 5 through

12, but it is probably most applicable to grades 7 through 12, and to college freshmen and sophomores. It can be used in the upper elementary grades if students are at or beyond the fifth grade reading level (Dale-Chail Index = 5.17); similarly, it has sufficient "ceiling" for use with college juniors and seniors, particularly if they are undecided or unrealistic in their vocational choices. The VDI is equally applicable to males and females and it can be administered to students in a variety of curricula, e.g., academic, vocational-technical, general, etc., and from diverse cultural and socio-economic backgrounds.

The VDI can be administered either individually or to groups of students. Completion time usually ranges from fifteen to twenty minutes. Scoring can be done by hand or machine. When machine scoring is used, it is done by the Measurement Research Center of Iowa City, Iowa. The scoring key was derived empirically from differences between the majority responses of the 12th graders in the standardization sample and lower grades tested. All items are monotonically related to grade. The number of correct items constitutes the Vocational Maturity (VM) score.

Although the VDI was standardized both cross-sectionally and longitudinally on large samples (approximately 10,000 students in all), additional normative data have been gathered throughout the United States and some foreign countries. Percentile norms are available for grades 5 through 12, college freshmen through seniors, vocational-technical schools, disadvantaged groups, American Indians, Mexican-American, Negroes, and others (e.g., French-Canadians).

The mean internal consistency of the VDI for the six grades is .74, computed by analysis of variance procedures. The Kuder-Richardson Formula 20 estimates are comparable. They are in the .70-.75 range for different grades. These coefficients reflect the heterogeneity of the VDI, which was designed to measure several clusters of related but nonetheless distinct vocational attitudes. The test-retest stability of the VDI is of the same order of magnitude as the internal consistency coefficients. The mean for the six grades, with a one year testing interval, is .71. This figure indicated that the ranks of subjects in the score distributions change somewhat from one occasion to another, presumably because of individual differences in rates of vocational development. That is, over the same

period of time some are maturing vocationally more rapidly than their peers hence their relative VDI score positions change from one testing to the next.

The "content" validity of the VDI has been established in two ways. First, items were written to operationally define concepts which have been proposed in contemporary theories of vocational development. Second, a rationally-derived scoring key, based upon the judgments of counseling psychologists, agreed in three out of four instances with the empirically-based scoring key. The "construct" validity of the VDI is evidenced by its relationships to achievement, intellectual variables such as grades, success in training, general aptitude, task-orientation, and adjustment level. This would be expected based on theory. The "criterion-related" validity of the VDI is supported by its correlations with other measures of vocational maturity, viz., the Gribbons and Lohnes Scales of Readiness for Vocational Planning (with indices of indecision and unrealism in vocational choice) and with instruments such as the Miller-Haller Occupational Aspiration Scale.

In summary, the VDI was rationally constructed from theories of vocational de-

velopment to measure attitudes which are salient to career decision-making. It is empirically scored, yielding a total VM score, and is applicable to a wide range of grades and groups. It is internally consistent, reasonably stable and it is related to numerous vocational and other variables.

Statistical Procedures - The statistical procedure used in this study were as follows: The F-test (Homogeneity of Variance) was used as a preliminary test to determine if the variance (spread between group scores) was equal. If the F-test indicated equal variances, the hypothesis would be tested by means of a one-sided Students' t-test for two independent samples. If the F-test indicated unequal variances, a one-sided Satterthwaite's approximate t-test would be used. Another component of the evaluation was an open-ended questionnaire distributed to participants in the in-service workshop. The questionnaire was give out on the last day of the workshop (June 30, 1972) and participants were asked to return their completed questionnaire at the first meeting in September. Ninety-three questionnaires were distributed of which sixty-six were returned.

1. My overall impressions of the workshop are:

2. Are there any behaviors or attitudes that you would consider modifying as a result of this workshop? e.g., feelings about things and people, degree and type of involvement, teaching style, administrative style, life style etc....
3. Select and list the three (3) most useful elements or aspects of the workshop for you:
4. Select and list the three (3) least useful elements or aspects of the workshop for you:
5. State three (3) significant learnings you now have about achievement motivation that you can apply in your work situation.
6. List any specific comments on the dynamics or procedures of the workshop (involvement).
7. Please comment on video feedback effectiveness:
8. Would you attend additional workshops in career awareness and achievement motivation?
9. Would you recommend workshops for other faculty at your school?
10. General rating for the workshop 1-8.
11. How would you rate this workshop in comparison to other teacher education experiences, e.g. university classes, school in-service?

12. What is your reaction to establishing this type of program as a regular part of a professional education curriculum at local colleges or universities?

13. Additional comments?

The questionnaire was designed to help the district evaluate the success of this in-service training workshop. It was hoped that the information gathered would reflect teacher attitudes about the workshop while it also provided greater information about the design, the materials used and the practicality of transfer to the classroom.

There were bi-monthly follow-up sessions for those teachers who wished to attend. While these were intended primarily for teachers at the seven experimental schools, so they could provide more information about the classroom implementation phase, more teachers attended. The purpose was thus broadened to a sharing of techniques and results among participants and across schools.

At each of the follow-up sessions, a tape recorder was available. Teachers were encouraged to record their feelings about the success of the original in-service workshop, the utility of the models presented when used in the classroom and the progress they had made, if any. As their experience with students in the

classroom increased, they were encouraged to use their "hindsight" in a frank "re-evaluation" of the in-service workshop. An analysis of these tapes is included in the Results section of this report.

Finally, each workshop participant at each of the thirty schools kept an activity log (diary). A summary of this information is provided in the results section. (See also Figure B)

The data collected for this study is intended to provide a basis for an examination of the possible interrelationship between the career in-service workshop and perceptible changes in students.

This chapter described the design of the study. It included a description of the sample, the experimental techniques and the instrumentation. In the following chapter, Results, the findings will be analyzed in some detail.

Figure B

LOG SHEET

CAREER AWARENESS/ACHIEVEMENT MOTIVATION EXERCISES

NAME _____
 SCHOOL _____
 POSITION _____

List Exercises	Time Used	Exercises developed by: List One: Your Workshop Teams Trainers	List Exercises Used with Faculty	Occasion Used	Exercises Developed List One: You Workshop Teams Trainers



CHAPTER IV

RESULTS

This chapter includes an analysis and interpretation of data in relationship to the working hypotheses stated in the first chapter.

Hypothesis 1

There will be statistically significant differences between treatment and control groups in the degree of vocational decision-making attitudes as measured by the Vocational Development Inventory (Crites, 1966).

Increase in vocational decision-making attitudes is defined as obtaining higher vocational maturity scores on the inventory in the posttest than in the pretest. The above working hypothesis is restated into the formal statistical null hypothesis:

H₁₀. In any randomly selected school, there is no difference between the average Crites Vocational Maturity Score (hereafter CVM) of students exposed to the simulation training in achievement motivation (hereafter treatment) and students who followed the usual curriculum (hereafter control).

In order to test H₁₀ directly and to assure that the research could be generalized to more than one school, hypothesis H₂₀ was necessary.

H₂₀. The average of the students in any one of the seven schools before the program equals the average CVM of the students in any other of the schools before the program.

This second hypothesis assures the researcher that the initial differences between schools do not contribute to the results when hypothesis H₁₀ is tested directly. If the H₂₀ is accepted, then the researcher would directly test null hypothesis H₁₀. If the H₂₀ is rejected, then one must test two additional hypotheses before answering the primary hypothesis of interest. In effect, rejecting H₂₀ means that any difference in the results could have been due to the differences between the two schools at the beginning of the project.

H₂₀ was rejected (via one-way analysis of variance for unequal cell size) which meant that the average CVM of the students (both experimental and control) differed from school to school on the pretest. Therefore, the primary null hypothesis could not be studied directly because, if there were significant differences after the program, one could not deny the possibility that they were caused by initial differences.



The first of the two additional hypotheses was needed to eliminate the possibility that the random assignment into experimental and control groups could have influenced the final outcomes.

H₃₀ For each of the seven schools, the average CVM of the experimental students before exposure to the program equals the average of the control students before the program.

Accepting H₃₀ assures the researcher that the eventual differences between experimental and control groups were not caused by initial differences between the two groups. It was first necessary to do a preliminary F test of equality of variances prior to each t test. The results of the F test were used to determine whether the Student's t test or Satterthwaite's t test was to be utilized as recommended in Winer (1966).

H₃₀ was confirmed in the pretest for all schools, which meant that the experimental and control scores on the pretest were equal, and that the groups were equivalent.

The schools could now be tested independently after exposure (posttest scores)

and then their results could be combined for a valid test of the primary hypothesis.

H₄₀. For each of the schools studied, the experimental students have an average CVM after exposure equal to that of the control group. The alternative hypothesis is that the experimental students have a higher CVM than the control group.

H₄₀ was rejected at the five percent level of significance for schools B, C, D, F, and G. In other words, the hypothesis was rejected in five of the seven schools. In schools A and E the hypothesis was accepted. In school A there was a negative trend. The scores of the experimental students in that school were lower on the posttest than were the posttest scores of the control students. In School E no trend was discernable.

Rejecting H₄₀ for schools B, C, D, F and G means that the students in the experimental program had significantly higher scores on the posttest than students in the control groups, though all groups started out statistically equal. For students in the above schools, (B, C, D, F and G) the program in career education which was conducted by their teachers or counselors did effect a measurable change

in student vocational maturity.

Hypothesis H_{10} , which was of primary interest in this study, was tested by combining the individual results for H_{40} by the procedure given by Winer (1962). H_{10} was rejected at greater than the .05 percent level of confidence when the independent tests were combined. Rejecting H_{10} indicates that the average vocational maturity score of the experimental group is significantly higher than the average scores of the control group, after the career education program has been completed.

According to this research, teachers who participated in the two week career education workshop and who then utilized the career simulations in their classrooms, were able to produce a positive change in the vocational maturity scores of students. This demonstrates conclusively that teachers/counselors who participated in an intervention model can teach career education effectively. The anticipated positive student outcome was substantiated.

Previous research demonstrated that professional trainers could achieve similar results through sustained group interactions with students. Whether or

not teachers/counselors could achieve these results, within the regular classroom situation, after training has now been answered affirmatively.

Hypothesis 2

Faculty involved in the summer workshop will anonymously assess the inservice experience in positive terms via the open-ended participant questionnaire.

The workshop participants had approximately two and one half months to consider the questionnaire. Responding to the questionnaire was really voluntary, since the formal obligation of participants terminated upon completion of the workshop.

Sixty-six of the ninety-three questionnaires were returned, or a percentage of approximately seventy percent. A detailed summary of the instrument is included in the Appendix.

Briefly, the questionnaire indicated that participants' impressions of the workshop were:

- ..impressive, helpful, informative, well planned
- meaningful for implementation in classroom,
- every teacher should experience similiar work-shop; creative and thought provoking; best ever;
- inspiring, refreshing; forced one to look at

individual attitudes towards education; motivational techniques belong in the classroom; meaningful for career awareness; great for self-evaluation; usable in the classroom; I plan to use it in the classroom.

In response to a query about modifiable behaviors or attitudes, participants

said:

..none I would modify; in teaching style, more encouragement of student planning, optioning and originality; No- two exercises I would not use with students at junior high. Yes- staff relationships; yes- become more involved; establish trusting relationships; use of self-awareness and competition to a greater extent; greater listening; modify feelings about students; use of feedback in teaching; spend more time on the sidelines (get out of students way of achievement); modify administrative style; idea that learning can be fun!!; increase student options; become more observant to student feelings; learning can take place in noise; acquainted with faculty at my school; allow self to evolve; force me to re-examine styles and attitude.

The most useful element included:

..video learning games- exchange of ideas; self-re-evaluation; getting to know people better; self-knowledge; interacting with peers; material and techniques provided; group spirit and warmth; discovery-critique; group interaction; getting

a chance to serve as a group leader, setting realistic goals; fast pace; hand-outs (career awareness materials); strategies for motivating and involvement; self-confidence; setting goals; handling of misunderstandings; being the student.

The least useful elements included:

- ..specific games; video in auditorium (better with small group use); no graduate credit; none; time lags in afternoon; not enough time; not enough interaction between major groups; media center speaker; misinformation between groups; methods of training student trainers; unclear direction; fatigue and boredom second week; loose structure of workshop; too much critique.

Applicable N-ach for classroom included:

- ..the exercises and games; setting goals; peer support; importance of good planning; decision-making; changing attitudes; the idea that motivation can be stimulated; realistic goals; need for early career orientation; less potential in all of us; effect of group pressure; most can be implemented regardless of course content

Workshop dynamics or procedures were felt to be:

- ..yes very involved; choice of involvement was a positive aspect; group work and motivation; I was really involved; totally; sometimes yes, sometimes no; I've never felt so involved in a workshop before; better than learning from

a book; difficult not to be involved; never a dull moment; essential to effective teaching/learning.

Effectiveness of the videotape was felt to be:

..helpful, see when you needed checking; not really!; a highlight; plenty of action; excellent; effective; great for group process; watch decision-making by colleagues; yes- serves as a memory secondary only to the experience itself; interesting; extremely helpful.

A question about their willingness to attend additional workshops in case of awareness and achievement motivation was answered affirmatively by sixty-two participants, with two participants uncertain and two who responded negatively. All sixty-six indicated that they would recommend the workshop for other faculty in their school.

55

Questions 10-12 are tabulated in their original form:

10. General rating for the workshop

(Satisfactory) 1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 (Unsatisfactory)

34 18 4 1 — — — 1

11. How would you rate this workshop in comparison to other teacher education experiences, e.g. university classes?

(Satisfactory) 1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 (Unsatisfactory)

38 16 6 5 — — 1 — —

12. What is your reaction to establishing this type of program as a regular part of a professional education curriculum at local colleges or universities?

(Very favorable) 48 10 4 3 1 ___ ___ (unfavorable)

The last item requested general comments. Responses included:

..well directed and conducted; enjoyable; extend the workshop to include more teachers and administrators; introduce more at follow-up; lively; timing poor; very demanding should use trained teachers as the workshop consultants next year yea!!

* * * *

Participants did, in fact, assess the inservice workshop very positively. The rate of return was gratifying, when compared to the expected return rates for similar instruments and in light of the intervening summer vacation. An unexpected teacher strike during the fall no doubt helped very little. Briefly, the participants indicated that they welcomed in-service workshops which involved them totally. They also felt that the overall approach (relating each of the exercises to the classroom) was very beneficial. Many felt that they were more sensitive to student needs and could deal more effectively with school situations as a result of the workshop.

TEACHER FOLLOW-UP INTERVIEW

Follow-up interviews were conducted with teachers from the seven experimental schools. The follow-up interview consisted of questions about how their students were adapting to the techniques which they had learned during the summer workshop. One teacher stated that students at her school had "a very negative attitude toward themselves" and that "it was pretty hard to get the students to realize their potential." She felt that students in the Washington, D. C. area were bombarded with negative view points by parents, teachers, counselors and peers. When I asked whether the program had changed this negative attitude, she exclaimed, "my students are beginning to see themselves in a different light and they are beginning to realize that goals are possible even for them." In relation to the career exercises, she felt that listening to her students during the goal setting exercises was valuable and personally exciting. She also said that students seemed really excited at their success and achievement in certain exercises. "They acted as though they had never experienced successful situations in school."

Schools make many assumptions about a student, his goals, his interests and his learning. She discovered that she had been setting goals for students rather than letting them set their own.

Another follow-up discussion indicated that there is no feedback process for students at the school in question. Teachers are too busy to consider individualizing any part of the learning process.

At yet another school, a teacher demonstrated individualized learning simulations with other teachers. He said, they were impressed with the results when they in turn tried it with students." "The summer workshop really helped me individualize my teaching and it also helped me with many ideas and techniques on how to work with classes, groups and particular interests in my school." "My growth has been remarkable." "I hope that some of it has rubbed off on the children."

I asked the teacher whether he thought his students were learning more now that he was using an individualized approach and he said, "I really don't know but I know that students are having more fun in school. They are attending to

business, attendance is up and the class is noisier." "I can read the disgust on other teachers' faces because of the noise level from my room but, for the first time, I'm really giving something of value."

The log sheets from the seven randomly selected schools show that a total of ninety-four exercises were used with students during the fall semester. A majority of these were teacher modifications of exercises from the original career manual. The teachers also introduced seventeen workshops to staff and faculty at their particular schools. Career exercises conducted for student and faculty groups included goal setting, trust (blindfold and disarmament), decision-making, learning strategies and others.

Most of the teachers introduced the career awareness exercises with The Name Game. Students really enjoyed it because they made new friends as a result of the exercise. The logs indicate that, in spite of the many duties that the workshop participants had, they went ahead with the planning and the additional preparation necessary to use the career awareness exercises. Many teachers said that they needed just a little more time, a little more help to really utilize this

type of learning situation and exercise approach.

Students were so turned on to the approach that teachers and counselors had difficulty limiting it to only test groups during the first semester. Teachers reported in their logs that the approach and the program opened them up beyond their expectations. They felt more free, more relaxed, more excited and exciting in a classroom, and they credit the in-service training program during the summer.

One last note: some teachers were using some of the exercises or adaptations of the learning strategy exercises as a weekly review in math and English. Others commented on the effect that small groupings had on student learning, on student goals and on the development of these goals.

THE FINAL HYPOTHESIS

Faculty involved in the training will stimulate further staff training at their "home" schools as indicated in their written reports and as seen through other pertinent sources.

Teachers/counselors conducting exercises commented on the success of their attempts. Many hold several positions within the school and wished that they could have had more free time to develop and use career models

"the models proved extremely helpful for me and the students in areas of self-awareness and trust."

"students were amazed how much they could learn in a short time."

"students love it."

CHAPTER V

DISCUSSION

One of the most significant contributions educational institutions can make to their students' lives is the nurturing of career decision making skills. These skills are the very foundation and framework for life's goals. As Wilson has eloquently stated it, "Beyond mere survival, the quality of a man's life is a function of the decisions he makes. In a very real sense a man is his decision." (1970, p. 145) This study chronicles an attempt to design, implement, and evaluate a teacher/counselor intervention model in career education. The discussion chapter contains a brief summary of the preceding chapters and the ultimate findings, implications, and recommendations of the principal investigator.

* * *

Educational institutions have traditionally separated those skills and talents needed for the perpetuation of the school system from those needed in the world that awaits students upon completion of their schooling. Because of their age or by virtue of graduation, students are released and, in effect, told to "go out and function like adults." Unfortunately society has not demanded a strong linkage

between education for life skills and education for school skills.

Dr. Sidney P. Marland has suggested revising curriculums at all levels to include the concept of Career Education.

It includes motivation toward a career in early childhood. Adolescent years, and sometimes beyond, are spent in orienting the student's talents, aptitudes and interests to information about career possibilities. (New York Times, June 1972, p. 9. Quote by Marland to Manpower Institute and the National Academy of School Executives in May, 1972).

This study was designed with the career education concept in mind: testing the relevance of using a psychological model to teach basic career oriented behaviors. The behaviors include the development of: (1) self-insight; (2) goals consistent with needs and talents; (3) mechanisms for identifying alternative life and career options; and (4) mechanisms for reviewing, ordering and reality-testing career decisions and goals.

Vocational psychologists agree that these behaviors are requisites of vocational maturation, yet they have not agreed on a school-based intervention process which might be incorporated to operationalize vocational development

theory. It is obvious that neither life styles nor vocational competencies consist solely of cognitive mastery, however, affective (experiential) approaches to these competencies are not usually part of the school curriculum.

McClelland offers achievement motivation research as a way to stimulate behavioral change within individuals. His research concludes that training can cause participants to feel that they are the active agents in determining the direction of their educational and vocational plans. His research also documents positive career changes in participants as a result of such training.

Prior career research in the city school district had demonstrated that achievement motivation simulations done directly with students tend to positively affect their vocational maturity. The main issue was, could teachers and counselors conduct a career education program with similar results? Can the concepts of decision-making, goal setting, vocational self-analysis, and planning competence be taught?

The major goals were realized through a staff development program which provided the participants with the skills necessary to help students achieve greater identity, make more realistic self-appraisals and accept responsibility for their

decisions.

Findings

Hypothesis I

There will be statistically significant differences between students who have been exposed to career awareness exercises and those who have not been exposed to such exercises, in the degree of vocational decision-making attitudes evidenced by the Crites Vocational Development Inventory.

Accepting the above hypothesis means that students exposed to the career awareness program experienced statistically significant increase over the control students in vocational maturity. This was measured by the Crites instrument. The Crites inventory purports to measure choice and decision factors related to vocations. Factors such as: (1) involvement in the choice process; (2) orientation toward work; (3) independence in decision making; (4) preference for choice factors; and (5) conceptions of the choice process, are all processes which have relied on the passage of time for their development.

Hypothesis I was substantiated. According to this research, in the classes where teachers/counselors conducted career simulations for one semester, students

did score significantly higher than students who had not received the training. The research demonstrates that an in-service workshop in career education (for teachers) caused student growth in terms of increased vocational maturity. Theoretically, participants in the original in-service training workshop will continue to enhance the decision-making ability of their students. The positive residual effect demonstrates that when a relevant intervention process in career education is offered to students, the resultant acceptance and growth can be measured.

Hypothesis 2

Faculty who have been involved in the summer workshop will autonomously assess the experience in positive terms at the conclusion of the two week program.

The program evaluation by participants was positive. Any in-service program must be viewed in positive terms. Participants will only continue a process demonstrated in a workshop if they view the process and the workshop in a positive manner. Though the program was rigorous, and though mother nature did her best

to assure attrition, attendance remained high throughout the program.

Hypothesis 3

Faculty who have been involved in the training will become more involved in student activities geared to career development learning strategies, as recorded in their logs and as indicated during bi-monthly meetings.

Both the teacher logs and recorded discussions support this hypothesis. Teachers became more involved and that activity was not just superficial. There was unanimous agreement that more time was needed during school hours to properly plan exercises. Several teachers noted in their logs that they would make modifications in the career program during the spring semester. This indicates sustained interest and commitment, though the project was formally completed. The logs indicate that career education activities will continue in those schools where teachers/counselors initiated such training in the classrooms.

Hypothesis 4

Faculty involved in the training will stimulate further staff training at their "home" schools as indicated in their written reports and as seen through

other pertinent sources.

Other sources included school bulletins, intra-school communications and program agendas prepared by the faculty. In many of the schools, faculty involved in the summer workshop asked their building administration for permission to demonstrate the techniques and methods learned during the in-service training. It was reported that interest among the rest of the faculty was high and that the training was exciting. Several teachers reported that their building administration wished them to continue training the school staff. One was cited as having made a very positive and significant contribution to the changes in faculty attitude during the year.

Implications

A primary implication of this research is, of course, that teaching faculty from the school system can become trainers in career education after a short, but intensive training period. Such faculty participants can initiate their own career education curriculum at "home" schools with meaningful results.

A second implication is that many different situations and courses can be career oriented, can be the focal point for introducing psychological career

concepts to children.

The intervention of a career awareness program can effect positive vocational maturational change at the middle grade levels. We had previously thought that vocational maturity could come only with the passage of time, but it should be possible to initiate an intervention model at almost any grade level.

A third implication of this research seems to be that students can internalize the process of vocational decision-making through exposure to direct educational methods. Ancillary to vocational decision-making skills is the ability to (1) appraise and reappraise values; (2) develop and modify attitudes toward oneself, others, and career-relevant aspects (e.g., work persistence, success); (3) become able to give and receive feedback constructively; (4) become more creative and more proficient in problem-solving; and (5) become more aware of aspirations in terms of realistic talent.

A fourth implication is that the study had an effect on attitudes. The positive movement of attitudes toward vocations gives rise to many interesting speculations. The processes of developing interest, commitment and motivation are just a few. McClelland contends that it is through the thought processes,

beginning with fantasy that actions or decisions come about. Career development curriculums continually refer to behaviors, such as career attitudes, taking responsibility and decision-making. Unfortunately the methods which evoke such behaviors remain vague. Evidence that a psychologically-based career curriculum can deliver these behaviors has been demonstrated in this study.

A fifth implication of this study relates to the role of simulations. Career awareness concepts were introduced through their use. While there was no attempt to evaluate each simulation's impact, the results indicate that the simulations were effective.

Among the corollary implications of simulations are that: (1) they could provide for the affective as well as the cognitive processes of learning: (2) they can be content oriented; and (3) their replication, evaluation, scheduling and experimental possibilities are unlimited.

A sixth implication is that teachers can create new career simulations for their own classrooms, with limited use of the models advanced in the workshop.

A seventh implication is that career decision-making programs can begin a process of examination, discovery and development among our youth. The career model relates the teaching process to the personal needs of each student.

A final, but certainly a vital implication of this study is that a career educator curriculum can incorporate psychological, vocational and academic features and be successfully employed as a model for any number of schools. Career education can be a formal approach to each student's attitudes, motivations, value clarification processes, goal clarification and self-evaluation, all of which are essential for mature vocational decision-making.

Recommendation

It is quite unique for a school system to engage in research which endeavor to create a career model as an intervention process in the classroom. It is even more unusual that the nature of such a treatment be psychologically based. Yet, the search for viable career curricula was considered worth the expenditure. With this trend in mind, the following recommendations for further research are offered.

1. Follow-up studies on the teacher teams should be undertaken to determine if their approach to the teaching/learning process has since been modified. A study should also be conducted to determine the number and content of teacher created career exercises.

Research should be conducted on the use of simulations. The use of affective psychological models in the learning process should be investigated.

Research on achievement motivation and its relationship to career development should be undertaken. Will the teaching of a structured course in achievement thinking be as effective as the omnibus approach used in this study?

Follow-up studies of the student subjects in this study need to be undertaken to determine the residual, long term effects. Did the treatment group make different decisions in their school plans, work, or life plans? How do their in-school activities compare to those of the control group? What, if anything, are they doing differently?

The specific behaviors which are considered to be positive by vocational development theorist bear investigation. Such research should attempt to identify the behaviors, but it should also attempt to elicit these behaviors.

Further research of the type reported here should be undertaken with disenfranchised students to determine the extent to which their goals can be incorporated within a school program.

Orientation programs, using similar procedures, should be

developed by both schools and industry. The results should be studied to determine if some of the techniques might have a "joining up" effect. In other words, do such procedures produce affiliation feelings toward one's organization?

The final recommendation is for continued research designed to stimulate vocational maturity. While the results are promising, continuous validation is necessary to assure the utility of this psychological approach.

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A P P E N D I X

EVALUATION QUESTIONNAIRE SUMMARY

CAREER AWARENESS/ACHIEVEMENT MOTIVATION WORKSHOP

RABAUT JUNIOR HIGH SCHOOL - JUNE 19 - JUNE 30, 1972

1. MY OVERALL IMPRESSIONS OF THE WORKSHOP ARE:

Very impressive

Very helpful.

Very informative.

Wished it could have lasted for three weeks.

Well planned.

The workshop, in certain areas, was very meaningful to me in terms of giving me many useful ideas I plan to use in the fall. Although I am not sure as to the outcome I do plan to use many of the games (with some modification) primarily with my homeroom. Although there are a few games I might be able to use with my history class, I think I will be more effective with my homeroom students.

I thought that the workshop was most enjoyable and educational.

This was a very worthwhile experience.

I am generally impressed with the workshop. Further, I feel that every teacher in the system should experience this type of workshop.

It was very informational, interesting and inspired me to return to school and try to do a better job with students and teachers.

Very creative and thought provoking - our trainer was an excellent non-directive guide who is skilled in group guidance. A high level of motivation was achieved.

I thought the workshop was excellent. I feel that I will be able to help my students more. Hopefully I will be able to help other teachers in the building.

The friendly relationships evident were extremely high and the stimulation was great. A cohesive group.

It is the best workshop in which I have ever participated.

Delightful. I have been inspired and definitely feel that the way subject matter is presented has much to do with motivation. We do like games.

Very inspiring and very refreshing.

Excellent, the time seemed to disappear.

It was very interesting and different.

Very favorable. I think it is one of the best I have attended - ever!

Well organized.

Trainers seemed to know what they were doing.

Most satisfying.

Organized well.

Interesting and understandable topics.

Excellent trainers.

It has caused me to think about several of my attitudes and methods in teaching. I think generally it was an educational experience.

Very effective.

Very interesting. A range of different activities. Well planned.

It was well organized, very provocative.

Was enjoyable and informative.

Outstanding.

Well organized.

Valuable information that can be relayed.

I feel that it was very informative and that the motivational techniques would be very helpful to regular classroom teachers in every subject.

This workshop was pleasurable and I liked the exchange of ideas that took place within my particular group. The facilitators were very helpful and did not dominate the sessions.

A truly enjoyable experience. I was not bored; very informative, introspective, and successful. High. Learned many techniques applicable to my classes.

It has been somewhat exhausting. Actually I believe it might have been more beneficial spread over 4 weeks and having afternoons for reflection and school-team discussion.

Most favorable. I felt most rushed during some exercises because of time.

Very stimulating, inspiring and motivating. I have gained very much and I am very excited. I plan to use and share everything with my co-workers.

The Career Awareness Workshop was a stimulating, motivating experience. It helped me to understand and evaluate myself as a person and as a teacher.

It provided meaningful concepts for developing career awareness. There were many models introduced that can stimulate many types of learning outcomes as well as behavior changes.

Very good. I believe that I have gotten quite a few ideas that I can definite use in my classroom.

A very rewarding experience, novel and challenging.

Great experience. Well constructed, allowed for great deal of creativity, self-expression, good leadership. No criticisms.

Rate it very high - organizationally, knowledge-wise, and innovatively.

Good. I will follow-through with applications at my school.

Very good - extremely helpful in setting the direction for the coming year.

Enjoyed workshop very much. Should be longer in time.

A valuable experience that all teachers should have.

The workshop was quite interesting, meaningful, and enjoyable. I was amazed at the wealth of experiences and learnings which I gained in such a short period of time.

2. ARE THERE ANY BEHAVIORS OR ATTITUDES THAT YOU WOULD CONSIDER MODIFYING AS A RESULT OF THIS WORKSHOP? e.g., FEELINGS ABOUT THINGS AND PEOPLE, DEGREE AND TYPE OF INVOLVEMENT, TEACHING STYLE, ADMINISTRATIVE STYLE, LIFE STYLE, ETC.....

I do not have any behaviors or attitudes that I would modify as a result of this workshop.

Yes, particularly teaching style. There were some very good ideas advanced for involving children of varying abilities.

I plan to give my students more options in methods of mastering and encourage their original ideas in planning or innovating.

I would not do away with any previously learned techniques but I would certainly adapt any of the processes to my regular routine if possible.

No - there are one or two games I would not use with my Junior High students.

My greatest effort will be directed toward modifying relationships between staff members (with each other) and relationships between staff and students.

I will probably become more involved since I have worked in the area of human relationships.

Yes. It seemed to me that during the last week there was such a rush to complete a certain number of activities, that many questions were left unanswered. Therefore, I would rather slow the pace if such a step seems indicated rather than rushing. I understand that you were trying to give us experience, but it still seemed rushed. You also should have more interaction between the 3 school groups. We in group III were too removed from the other 2 groups.

I will continue to try to establish trusting relationships and to help students feel wanted in an effort to help them improve their own image or self concept.

I would try to involve students more.

Increase use of self-awareness and competitive games.

One of the things that had meaning for me was the intimate understanding of the feelings of people who are having difficulties.

Yes, listening more. A positive effort to put people at ease, individually as well as in a group.

Yes, those behaviors are my teaching style and my feelings about students. I feel my teaching style was too monotonous. These workshops have given me some ideas to use in adding variety to my classes. I also feel that I may be too rigid in dealing with my students as a result of various discussions in the workshop.

My teaching style will be geared more toward helping students to build positive images of themselves and their abilities.

Degree and type of involvement with colleagues will be affected next September.

I do hope that I have enough "feedback" to carry over into my activities on a daily basis.

Desire to persuade people to participate.

I think my type of involvement with students will have more useful content in regard to helping them realize that they can accomplish.

More awareness of students' situation which would prompt me to be more willing to modify.

I am going to spend more time on the side lines. After motivating the students I shall remove my self from the center of attitudes and let them take the ball and run with it until I see that they need help.

I definitely plan to modify some of my attitudes and behavior patterns in relation to my teaching style.

Yes, mainly the administrative style of my school and city, also the life style and attitudes of my students.

No....to a certain extent I was aware of many of the techniques mentioned in the workshop.

I will try to reinforce the concept that learning can be fun.

Try to learn to deal with frustration and failure in more positive manner. Work on decision making.

Much greater enthusiasm and interest in trying to implement a career awareness for students and confidence in my ability to work up a program.

Introduction of games, other techniques into my school.

I will give students more options. I shall be able to understand other person's feelings. I shall change.

I will be much more observant as a result of this workshop and attempt to involve myself with my student's feelings to a greater degree.

Learning can take place in noise. Learning takes place in a trusting environment.

I hope to become better acquainted with the faculty and staff of our school as well as students.

As a result of the games and critiques, I feel that I have gained more insight and a broader base from which to draw in helping students. I can see modification in techniques evolving.

Yes. After the blindfold game, I am exceptionally understanding of children blind to reaching techniques of reading, competing, etc.

Not really - however, I became more aware of the changing society, and we must deal with people on current standards and not those of past years.

Yes. This workshop has given me a new insight into motivational techniques which can be applied in almost any area.

Certainly the workshop has provided a wealth of knowledge which would and will require my pre-examining teaching styles, negativisms about people hastily arrived at and certainly techniques which could be employed in making my own life more meaningful.

3. SELECT AND LIST THE THREE (3) MOST USEFUL ELEMENTS OR ASPECTS OF THE WORKSHOP FOR YOU:

Video tape feedback.

Stranded on the moon.

The math game.

First hand experience with materials that I might expose students to.

Exchange of ideas.

A chance to re-evaluate myself in terms of procedures I have followed in making students aware of setting goals which are realistic.

I got to know people better.

I got to know myself.

Acting and interacting with teachers of other schools.

Sharing ideas for implementation.

The wealth of material provided.

Personal relationships (group spirit and warmth).

Challenging learning experiences.

Discovery of personal limitations (I really felt I had ironed out my biases and am grateful).

Useful aspects - method of handling group.

Individual performance.

Group performance.

Critique - most valuable.

Increased my interest in group participation.

New techniques learned.

Some insight gained in the stimulation and motivation of students.

Involvement in group and team activities.

The opportunity to share others ideas about how these activities can be used in school related activities.

Frequent critiques and printed and visual results.

The ideas gained implications made as a result of game involvement, the collection of "handouts" which can be reviewed at leisure and utilized in class groups.

Group interaction esp. name game which really got us off to a good start.

The importance of having input from more than one person, but realizing that the leader is the key to the group's achieving the goal.

Serving as a small group leader.

Get people to get involved with each other.

Respect each other as individuals.

Feedback is important in constructive planning.

Total group participation and involvement.

The use of games to help set realistic goals.

The stress on self learning.

Using games as a means of learning.

Make sure pupils understand directions.

Varying of pupil learning activity.

Specific game suggestions.

Demonstration of learning in friendly, cooperative ambient.

Awareness of media center capabilities.

Close relationship with members of other schools

Group techniques or dynamics.

The hand-outs.

Our participation in the activities.

Seeing the group on tape.

Implications to create motivation.

The games were interesting and I feel that these can be useful in my teaching.

Learning can be accomplished by using motivational strategies.

Importance of and techniques for goal setting.

Confidence in self.

Trust building between teacher and pupil.

Interpersonal relationships developed by team effort.

Goal setting exercises.

Games which can be used in lifting self esteem of students.

Name game. Dart Game. Critique and feedback.

Use of video tape.

Use of some games in the classroom.

The closeness of our group because we had to learn each other's name..

Developing additional ways of involving myself with people.

Ideas for motivation and hopefully changing some negative attitudes to positive ones.

Teachers and counselors experienced some of the feelings students have in a learning situation.

Forced responsibility and learning.

Invaluable information and motivation techniques.

Handling of misunderstandings.

Communication of feeling and the aspect of decision making.

Showing the ways in which you can get persons to participate.

Helping people to re-examine their thinking.

Making participants look at every activity as a learning situation.

Becoming the "student" instead of the teacher, i.e., experiencing what they must feel in certain situations.

Experience in working in a group situation.

Interaction with persons of neighboring schools.

Gaining new ideas and concepts.

Sharing problems and concerns.

Modification of attitude toward real communication between people.

How to involve whole class in learning activity.

Materials.

4. SELECT AND LIST THE THREE (3) LEAST USEFUL ELEMENT OR ASPECTS OF THE WORKSHOP FOR YOU:

Disarmament game.

Too much grouping at times.

Video tape feedback in the auditorium.

Maybe the involvement of the principals could have been handled differently.

Most elements of the workshop have proved useful. I, therefore, would not necessarily rate any of the aspects least useful.

Maybe "memoviam game".

War Game.

There were some time lags in the afternoons, otherwise, there were no negative elements.

There was not enough interaction between the three groups.

Bring the groups together.

Not enough time for the interchange of techniques which could be applied.

I don't feel that anything that occurred would be listed here by me. There seemed to be a lesson in everything and I do feel that every activity could be adopted for use in my situation, although I'd have to give a lot of thought to the adaptation of "Disarmament".

I really can't think of any. Each activity lends itself to some applicability.

Having no questioning after "ideas" have been stated.

Not giving pupils a choice of participating.

The video tape pictures hurt my eyes - the screen and lighting were poor.

I would like to have spent some time on learning of studies found in the area and to have watched tapes or films of techniques being used with actual classes.

The speaker from the Media Center.

No graduate credit.

The ring toss games.

Games that were too long, developing into boredom.

The representative of the Media Center used a negative rather than positive approach.

The concepts used to introduce "trust".

The sessions dealing with audio visuals.

Methods of involving students.

Mis-information within groups.

Methods of training student trainers.

Some of the games just dragged on and on and on and on and on and were redundant.

Media Center discussion.

Feeling of boredom, fatigue during second week.

Video tape too time consuming.

Workshop too loosely structured.

Often the directors were not clear.

There were times when volunteers were involved in activities against their wishes.

Too much critiquing.

None.

5. STATE THREE (3) SIGNIFICANT LEARNINGS YOU NOW HAVE ABOUT ACHIEVEMENT MOTIVATION THAT YOU CAN APPLY IN YOUR WORK SITUATION:

The name game, in getting to know your students.

Career Awareness - finding students goals .

Data for records.

Although students should be encouraged to be realistic about goal setting, there is nothing basically wrong if they dream.

The dart and dice game.

There must be a desire to achieve.

There must be a measure of success.

Group (peer) support is important.

Must be well planned.

Learning can be interesting even if forced.

Decision-making and goal setting.

Changing attitudes.

Motivation can be learned & stimulated.

How to motivate listening skills.

How to let students accept responsibility for own achievement.

Motivation pays off highly.

Set realistic goals.

Development of techniques to interest and guide people toward realistic goals is an important part of achievement motivation.

Bring the groups together.

That any game can be modified to involve everyone and be used in teaching a specific class.

That today's students should become somewhat career-oriented early in school.

Our potential is often greater than we realize.

A good leader can push us toward a goal that might seem impossible at the time but is really within the realm of our ability.

Most people have the feeling they can't achieve as much as they can.

The difference in behavior when acting as a member of a team than working for yourself.

I can use group sessions more with the same or similar problem to see how each group solves its problems.

Need for fun.

Increased motivation to members of a team.

Take a gamble.

You should decide on a method of attack before trying to do an activity.

Group pressure can increase one's motivation.

Competition used to a reasonable extent can increase motivation.

Many of the games played can be implemented in science as a motivation for my students.

Learning through application of game techniques.

Students are motivated, but there has to be relevancy in order to channel this motivation for positive results.

6. LIST ANY SPECIFIC COMMENTS ON THE DYNAMICS OR PROCEDURES OF THE WORKSHOP (DID YOU FEEL INVOLVED?)

Very much so.

Most of the time I felt involved in the workshop. Only twice I felt as if I were not involved (a) the Disarmament Game and (b) when our small group left home base.

The workshop was well directed in most instances, and was designed for both individual and group involvement.

I am basically shy and these "forced" experiences gave me invaluable experiences; I have more self confidence.

Yes, very involved. Trainer was excellent in involving all and pulling information from all.

Definitely so.

Very well done.

I felt quite involved; a positive aspect was the freedom to become involved or not to be actively involved.

I did feel involved but there was one afternoon when a group of us felt left out (while others were involved in another room) probably, because we had no leader present to guide us.

Yes. Group work, competition both group and individual, do wonders for Motivation.

Yes, as a matter of fact this involvement in playing and planning could also be used in a classroom.

I really felt that I was really involved in every part of the workshop.

In all activities, I felt involved; however, I felt that at times explanations were vague.

Everything was fine until we played the Disarmament game. I didn't like the manner in which it was introduced. After that I became bored with the game.

I felt involved in all aspects of the workshop but I was very confused and uncomfortable with the Disarmament game.

It was difficult to be an isolate in our group. The facilitators used group dynamics and pressure to involve all members of the group.

Sometimes yes - sometimes no.

Yes, except when I voluntarily withdrew my involvement because of personal reactions to specific situations.

I was very much involved although I may not have been an aggressive participant. Workshop provided much in prospect, some frustration and a desire to redefine my goals.

I have never felt so involved in a workshop before. Actually experiencing a situation is of much more value than learning from a book.

I felt very much a part of and involved in the activities. We received a good feeling upon achieving a goal.

Totally involved.

Total involvement was good.

The workshop involved all participants in each activity.

It was difficult not to be involved. The trainers seemed to have a high degree of knowledge and interest and shared those experiences in conducting the workshop. NEVER A DULL MOMENT.

My contention that group dynamics is essential to effective teaching-learning.

7. PLEASE COMMENT ON THE EFFECTIVENESS OF THE VIDEO TAPE FEEDBACK SESSIONS: WERE THEY HELPFUL? IF SO HOW?

I do think the video tape feedback was helpful because you could see when and where you needed to check yourself:

Not really. I honestly believe it would have been more effective in smaller groups.

The video tape feedback gave us the chance to see the other groups in action and to make comparison.

This was a highlight since many of us for the first time saw ourselves as others do.

The video tape feedback was excellent; it enabled us to see ourselves and the other groups performing the different exercises. It was helpful in the critique also.

Very helpful. Especially effective in analyzing group process, finding or discovering weaknesses, improving technique, seeing ourself as others see us.

Being able to observe group interaction and individual participation (or non-participation) gave a lot of insight into development of educational experiences and possible implications for future use.

Yes, I think through it we were able to get a view of what was happening in the other groups.

Great to see others and oneself in action.

I think they were helpful in that they gave each participant a chance to really listen to and analyze another's ideas, thoughts, and reactions to the same things.

Yes - to catch things we didn't notice when we were involved in the exercises and to study the progress of the teams.

The video tapes did point out some interesting facts about anxiety in the name game. They also gave me some insight into how to communicate with my students and how I can improve my means of communicating with them. The tapes were not as helpful as they could be because the sound was not very clear.

If the sound had been better it would have been more effective. The idea is good.

Excellent. The video tape feedback allowed participants to see themselves (physically) as others do. I am interested in using the video tape in my classes in social studies.

Somewhat, but generally secondary to direct experience of game. Interesting to see myself as an observer.

Extremely helpful.

Very good. If involved with students in schools they can see themselves in actual classroom situations.

They were very helpful to me in that I was able to see my actions and reactions as compared to actions and reactions of the other participants.

8. WOULD YOU ATTEND ADDITIONAL WORKSHOPS IN CAREER AWARENESS AND ACHIEVEMENT MOTIVATION?

Yes 62 Uncertain 2 NO 2

9. WOULD YOU RECOMMEND WORKSHOPS FOR OTHER FACULTY AT YOUR SCHOOL?

Yes 66 Uncertain _____ NO _____

10. GENERAL RATING FOR THE WORKSHOP

1	2	3	4	5	6	7	8
Very Satisfied							Unsatisfied
<u>34</u>	<u>18</u>	<u>8</u>	<u>4</u>	<u>1</u>	<u> </u>	<u> </u>	<u>1</u>

11. HOW WOULD YOU RATE THIS WORKSHOP IN COMPARISON TO OTHER TEACHER EDUCATION EXPERIENCES e.g. UNIVERSITY CLASSES, ETC.

1	2	3	4	5	6	7	8
Very Favorable							Unfavorable
<u>38</u>	<u>16</u>	<u>6</u>	<u>5</u>	<u> </u>	<u>1</u>	<u> </u>	<u> </u>

12. WHAT IS YOUR REACTION TO ESTABLISHING THIS TYPE OF PROGRAM AS A REGULAR PART OF A PROFESSIONAL EDUCATION CURRICULUM AT LOCAL COLLEGES OR UNIVERSITIES

1	2	3	4	5	6	7	8
Very Favorable							Unfavorable
<u>48</u>	<u>10</u>	<u>4</u>	<u>3</u>	<u>1</u>	<u> </u>	<u> </u>	<u> </u>

13. GENERAL COMMENTS

I think there was a lot of insight given on how to motivate pupils that feel like they are not involved, and how to get this particular student involved.

The workshop was well directed in most instances, and was designed for both individual and group involvement.

If possible, this type of workshop should be extended to include other teachers and administrators.

This questionnaire or similar form could have been given the first day in order to consider critical thinking and outcomes daily. Personally, I could have worked on this better in solitude.

I enjoyed workshop thoroughly.

This is one of the best workshops I have attended. I know, that is, I feel I can use more obtained here than at any other workshop.

The follow-up workshop should be used for introducing other materials that we missed.

The workshop was well organized and offered many avenues to helping our students to higher achievements.

Lively; never a dull moment even throughout the disarmament game, where one was forever trying to understand.

I think there should have been more interaction among the three teams.

This has been a beautiful experience for me.

It was very inspiring and enlightening to the extent that it supplemented training in educational and occupational information.

Very well administered with valuable information.

This workshop was well organized and the facilitators were well prepared and interested.

After a few days of participation, the stipend seemed unimportant. I do not feel that it is necessary for the principals to attend. Teachers and counselors should be able to motivate the administrators when they return to their schools.

Excellent, just need more time - summer is rather tiring, but perhaps during year, on going workshops good idea.

Very impressed and pleased with trainers - not only pleasant and enthusiastic but competent.

First two days I saw no direction to workshop. Things began to jell around 3rd or 4th day. I looked forward to Career Awareness Booklet, but was disappointed it was not used. I found 2nd week too loosely structured - I expected more! I was somewhat bored and very tired. Overall, I found the workshop profitable and I will incorporate it into my school.

I would have wanted this workshop to have begun one week later. For teachers and counselors who have spent an extremely demanding year a week's rest and relaxation would have been very beneficial. Many persons would have entered into the workshop more quickly if they had been more rested.

Very interesting, very informative.

Usage of participants this summer as consultants in the next program to be conducted in the future.

Atmosphere was very relaxed and well motivated for this kind of workshop.

The workshop was a rewarding experience. I would gladly attend other of this nature.

This type of program should have been in progress long before now - colleges should include courses leading to degrees in "Human Ed."

The workshop was too short for the wealth of material we received. We needed more time to digest it. It became a little boring the last couple of days. Near the end of the workshop the time should have been used to do at least one lesson with a small group of children. This workshop was designed to aid a creative individual.

With public education under such scrutiny, the need for a workshop of this nature cannot be overemphasized. Realistic and practical in-service education for teachers and administrators is needed desperately and it is this kind of workshop which would meet the needs of many an educator. Perhaps the most important aspect of this workshop could be labeled - "Human Relations".