VIDEOTAPE VS. LIVE PRESENTATION: A COMPARATIVE STUDY OF TWO CAREER PLANNING WORKSHOPS

KALE GENE NELSON

MAY 1, 1993
Videotaped vs. Live Presentation:
A Comparative Study of Two Career Planning Workshops

by
Kale Gene Nelson

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May 1993
Videotaped vs. Live Presentation:
A Comparative Study of Two Career Planning Workshops

Kale Gene Nelson

Has been approved: April, 1993

Sybil A. McClary
Chairperson

W. A. Breytspraak
Supervisory Committee

W. A. Breytspraak
Director of Graduate Studies
To Mom and Dad, who taught me the value of hard work and the importance of an education.

Especially to Kelly and Fletch, for their patience and encouragement.

Thanks to all my family for their love and support. I love you all very much.
Abstract

Formal evaluation of two career planning workshops was conducted to determine if comprehension and satisfaction differed between two various styles. Two separate groups of college students participated in a live presentation or a videotaped presentation. A satisfaction survey, based on a Likert scale, and a twenty question comprehension test was administered to each group. There was no significant difference between the two groups. Videotaped presentations, rather than live presentations, regarding career planning topics may provide sufficient resources for college students. Suggestions are made for future studies in regard to the use of videotaped presentations for the purpose of instruction or training.
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Introduction

Careers continue to change as technology changes. Today new careers are emerging so rapidly and, in some cases, changing so continuously that it is not possible to compile, for each new field, standardized information on its advantages and disadvantages, education or training needed, working conditions, number of workers, or typical earnings. Many colleges now offer creative courses leading to new careers. Other institutions are educating and training personnel for new technical work.

The shift from menial to mental work is a critical one. An economy based largely on professional work requires a more highly trained work force. Educational institutions and employers utilize workshops and seminars to help educate individuals who want to advance in their careers.

Work so often determines where one lives, what one earns, who one marries, if one marries at all, and one's overall lifestyle. Work takes up most of a person's time and significantly affects other important aspects of one's life.

For these reasons career planning should be taken seriously by all people in today's work force, especially college students preparing for
professional lives. The career search should begin well before a student's senior year in college. In fact at some colleges and universities, career planning begins as soon as a student steps on campus.

College career placement offices deal with more than helping current students find jobs. Career counselors work with people who need and want assistance in their entire career development. In some settings, this may mean helping individuals move along a career path, or be more effective in integrating work roles with learner and family roles. It may also mean working with displaced workers who need short-term job placement, long-term career exploration, and decision-making assistance. Career counselors help students arrange internships or summer employment. Their responsibilities also include identifying potential employers and making contacts with those companies or individuals so that pertinent information may be passed along to students in the job search process.

Career counselors need to acquire competencies in such areas as general counseling theories and practices, career and labor market information, assessment, program development, management and
consultation. To relate this information to students in a timely manner requires unconventional methods. With the widespread popularity of video cameras, along with major budget cutbacks in higher education, many college career placement offices have begun using video-taped presentations to provide students with important information which will assist them in the many aspects of deciding on a career and finding a job.

Prior to the 1950s, theorists and practitioners focused their attention on the occupational aspects of the transition from school to work. In the 1970s, many writers and researchers defined career development as one aspect of human development. More specifically, career development was often described as the interaction of the psychological, sociological, economic, physical, and chance factors that shaped the career of sequence or occupations, jobs, and positions that individuals held during their lives (National Vocational Guidance Association, 1973). Career planning is much the same today, it is a life-long process.

Because students have diverse backgrounds, programs need to be flexible in curriculum design and structure. Student advisement and
career counseling must be tailored to students' backgrounds. This is a very difficult task, particularly at large colleges and universities which serve thousands of students and alumni each year.

For example, in the field of health care administration, career planning has never been more important than it is today (Joint Committee of the American College of Healthcare Executives and the Association of University Programs in Health Administration, 1990). Faced with continuing pressure to stem the rising cost of health care, growing access-to-care problems, and what many believe to be inadequate third-party reimbursement, health care programs are being forced to do more with less. A decade ago, those pursuing careers in health administration tended to seek out jobs primarily in hospitals or perhaps nursing homes. Today, careers in health administration are not limited to these settings.

Career planning helps ensure that individuals become focused as early as possible on the career path they intend to pursue and that both their educational endeavors and work experience help move them in that direction.

Educators have repeatedly stressed the importance of instructional
interaction within the learning process (Bruffee, 1982; Flanders, 1970; McCroskey and Anderson, 1976; Salamon, 1981; Shey, 1987). Higher education personnel are constantly searching for more useful instructional tools and devices. Films and video tapes seem to hold promise in this area. Many career specialists are still trying to identify the most helpful vocational treatments by evaluating single devices, seminars, and individual counseling. Although positive evaluations have been obtained for a wide range of treatments, a clear understanding of how vocational interventions function is lacking, and there is no compelling evidence for providing specific treatments for specific student needs (Holland, Magoon, and Spokane, 1982).

**Career Seminars**

The most popular form of group treatment is the use of seminars or workshops. It is estimated that 87% of the career centers on larger college campuses offer career workshops and seminars (Goodson, 1982). The developers use a wide range of materials and theoretical orientations, and evaluations suggest that diverse treatments have a useful impact (College Entrance Examination Board, 1978; Evans and

The distribution of research about the forms of career planning workshops is uneven. The majority of old and new treatments have generated little evaluation or research. Therefore little discussion about previous findings can be made regarding career planning. The author believes that similar research done in a classroom instructional setting serves as excellent reference to this type of study.

**Careers 2000**

Changing technology and business practices, increased foreign competition, and shifts in the demand for goods and services will reshape tomorrow's job market, making the need for comprehensive, up-to-date, and reliable career information more important than ever before (Occupational Outlook Handbook, 1991). Preparation for tomorrow's jobs will require an efficient match between work place requirements and worker skills.

The United States economy is projected to provide 24 million more
jobs in 2005 than it did in 1990. The work force will be changed by increased employment opportunities in hundreds of occupations but the displacement of workers in others.

Executive, administrative, and managerial occupations are projected to see a faster-than-average growth for job opportunities, specifically those positions in the service industries and health care fields. Other areas that show good job opportunities into the next century include hotel and restaurant management, management analysts, and corporate consultants.

The most difficult area in executive, administrative, and managerial occupations will be government chief executives and legislators. Budget restraints will result in the reduction of these types of government jobs. Although marketing, advertising, and public relations managers' positions will increase by almost 50%, competition for these jobs will be intense, not only from other college graduates, but by present managers and experienced professionals as well.

The job opportunities which are projected for the most growth through the early 21st century will be those jobs dealing with computers.
Positions as computer systems analysts and operations research analysts will be available to graduates who combine courses in programming and systems analysis with training and experience in applied fields. Computer programmers will be in high demand but graduates must possess a major in computer science or a related area and have experience or training in fields such as accounting, management, engineering, or science.

Other professions which indicate substantial growth for the next fifteen years are paralegals, nursing, social work, and administrative support positions. Education, especially for individuals with a terminal degree, will be a field that will offer good opportunities. There will be a high need for male teachers at the elementary school level.

If the present trend continues, a college education will be vital for individuals entering the job market. In 1990, the unemployment rate was 5%. For people with four or more years of college, unemployment was 2.5%. For people with one to three years of college, unemployment was 4.2%. For high school graduates, unemployment was 6.3%, and for non-high school graduates, unemployment was 12%. These statistics show the importance of higher education. This does not mean that everyone must
have a four year college degree to find a job. Nevertheless, an increasingly important difference is emerging in the opportunities available to people, depending on their educational preparation (Occupational Outlook Quarterly, 1990).

**Interaction vs. Video**

A number of researchers state that education is a social process (Bruffee, 1982; Salomon, 1981), and interaction should play an integral part in that process. A previous study (Richie and Newby, 1989) compared the effects of performance, attitude, and interaction in a classroom/lecture discussion vs. live televised interaction. Twenty-six college undergraduates were randomly assigned to one of three treatment groups. The groups consisted of instruction delivered within the following settings: (a) traditional classroom in the presence of an instructor (live studio), (b) TV broadcast studio classroom in the presence of an instructor (live studio), and (c) studio classroom with television monitors instead of an instructor (distance). Each group received the same rehearsed presentation.

As shown within this study, the amount and type of interaction
did not have an impact on overall performance; however, those participants experiencing more interaction also reported being more at ease and enjoying the instructional situation more. Richie and Newby (1989) believe "Even if interaction does not have a significant effect on performance, attitudes may have important implications. A more positive attitude may help students finish a course of study" (p. 42). Holmberg (1983) attributes higher levels of communication with more motivated students. Hence, higher satisfaction results with more communication taking place.

Another study (Kivlghan, Johnsen and Fretz, 1987) describes how career group participants rate the relative importance of what the subjects learned in career planning groups. This study indicates that career group members most highly valued expressing feelings, a sense of universality, the existential factor of taking responsibility for one's own decision and the cohesiveness of being an involved group member.

The purpose of this study was to describe how career group participants rate the relative importance of therapeutic factors for their learning. A second purpose of the study was to examine differences in the
ratings of the therapeutic factors by group participants with more or less successful counseling outcomes.

Two items were measured: (1) change in career development status, and (2) participant's perception of the important aspects of the group. Participants were given a list of the curative factors and rated how important each factor was to their learning in the group. There were nine career groups, each meeting for four two-hour sessions. The sessions focused on four topic areas: interests and abilities, values and life style, occupational information, and decision making. Each group's leader presented similar structured exercises in each of the sessions.

The results of the study showed that career group members most highly valued expressing feelings, a sense of universality, the existential factor of taking responsibility for one's decision and the cohesiveness of being an involved group member. That expressing feelings was the most highly rated change mechanism is somewhat surprising given the rational problem solving approach that characterizes most of the career counseling. The authors conclude, "The results have implication generally for people doing career counseling and specifically for those providing
career counseling in groups/classes. Career group participants highly value the emotional aspects of the career counseling process." Group leaders have to help clients gain a cognitive framework for integrating their experiences. These results support Yalom's (1985) contention that learning in groups is a two-step process: emotional involvement/ expression and gaining a cognitive framework for integrating the issues discussed.

Findings of Reid and MacLennon (1967), whose review of 350 instructional media comparisons found no significant difference in comparisons of televised with face-to-face instruction. They also found that courses that had been videotaped and compared with face-to-face instruction produced no significant difference in learning.

Reid and MacLennon (1967) did, however, report favorable results for other uses of video instruction. When videotapes were used in observation of demonstration teaching, teacher trainees gained as much from video observation as from actual classroom visits. In addition, when used in teaching performance skills, films often produced a significant increase in learning and an improvement in student attitudes.
In a similar study (Cohen, Ebeling and Kulick, 1981), although 28 previous studies favored conventional instruction, visual based instruction examination performance was better than examination performance in a customary class. A goal of much of the research was to compare the effectiveness of visual-based instruction and conventional teaching.

The authors of this study collected a large number of studies that compared effects of visual-based instruction and conventional teaching. The next step was to code the study features and quantify the study outcomes. To be included in the analysis, a study had to meet three basic criteria. First, it had to be carried out in an actual college class. Second, the study had to measure the student outcomes in both visual-based instruction and conventional groups. Third, the study had to be free from major methodological flaws.

The findings were reported in five areas. Achievement: visual-based instruction examination performance was better than examination performance in a conventional class. Retention: though not statistically significant, the average retention score was higher for the visual-based
instruction class than it was for the conventional class. Aptitude-Achievement Correlations: more studies showed the correlation between aptitude and achievement to be higher in the visual-based instruction classes than in the conventional classes. Student Attitudes: conventional class ratings were higher than the ratings of the visual-based instruction classes. Course Completion: the withdrawal rate was higher in the conventional classes than in the visual-based instruction classes.

Another study (Robbins and Tucker, 1986) has shown that people with high goal instability performed better in interactional than in self-directed workshops. Career clients at a university counseling center were divided into groups representing three levels of goal instability and randomly placed into either self-directed or interactional career workshops. Changes in levels of career maturity and career exploration behavior were tested.

Interaction effects were found for both career maturity and career exploration variables, such that those people with high goal instability performed better in interactional than in self-directed workshops, whereas people with low goal instability performed the same regardless
of workshop type. The authors were surprised to find that participants preferred the interactional workshop regardless of goal instability level, suggesting that use of self-disclosure and leader modeling may boost the effects of an otherwise information-oriented intervention. The results support the notion that people with varying degrees of goal instability respond differently to the environment in which career information is presented.

Some investigators have shown that in classrooms with higher levels of interaction, students had higher levels of achievement (Boohar and Seiler, 1982; McCroskey and Anderson, 1986). Interaction, as well as anticipated interaction, has also been shown to positively influence students' attitudes (Yarkin-Levin, 1983).

In any case, research indicates (McCroskey and Anderson, 1976) that a large number of students in an educational setting prevents effective learning. "Instructors often state that because of the large numbers of students they must teach, they are not as effective in their teaching" (Boohar and Seiler, 1982). Therefore, whether using conventional methods or videotaped presentations, learning in small groups is usually preferred.
Films and videotapes have a number of properties that make them effective instructional devices. They can force attention to specific details, particularly in sequences. Unlike the human eye in the real world, the camera is not distracted by extraneous or unimportant events. In addition, when a film is viewed in a darkened room, the attention of students is physiologically focused on the lighted screen.

Films and videotapes can also concentrate on an experience. Through editing and use of time-lapse filming techniques, films and videotapes can take events that might not occur together or that might take a long time to occur and reduce them to a manageable length for viewing. Similarly, events that occur too quickly in real life can be slowed down sufficiently to permit careful examination and analysis. Ward Mitchell Cates (1989) sums up the use of videotapes in the classroom, "The real promise of films or videotapes is not their ability to replace people, but the film's ability to augment an individual's teaching."

An important attribute of the live presentation is the ability of the audience to interact with the presenter. With interaction, individuals may have the opportunity to ask specific questions and receive additional
information about the topic. This information may be shared by the presenter answering questions or through discussion between the individuals in the audience.

In any case, this author believes that this type of improvised social interaction increases the amount of knowledge that people gain when participating in informational workshops. Videotaped presentations do not allow for interaction between the subject and presenter. Once the information is presented the audience does not have the opportunity to ask specific questions. If the audience knows that they will have the opportunity to interact with the presenter, they may be more attentive to what the presenter has to say. This would seem to indicate more interest in the subject and allow the audience to gain more knowledge about the topic being discussed.

The author believes that an audience would be more likely to discuss the issue being presented, not only at the time of the presentation, but also in informal discussions among peers.

**Purpose of the Study**

The major purpose of the present study is to test college students'
satisfaction and comprehension of material presented in two career planning workshops. This study worked with two separate groups. Each group was given an identical 15 minute presentation covering the topic "Careers 2000." One group was administered a video presentation while the other group was administered a live presentation. The decision to carefully control the length of time and material was to allow for easier comparison between control groups (Spokane and Oliver, 1983). The content was taken from career planning journals and The Occupational Outlook Quarterly (Berman and Cosca, 1992).

The presentations discussed above projected future trends for the labor market from the present to the year 2005. Statistics were given concerning the number of jobs which are projected to be available over the next fifteen years. Information regarding sample occupations that appear to have positive outlooks as well as negative ones were also provided. Additional information about the present unemployment rate in regard to the number of years of higher education was included in the presentations.

**Hypothesis**

It is hypothesized that, compared to the videotaped presentation,
the live presentation group will show more satisfaction. It is further hypothesized that more knowledge of the information presented in the workshop will be retained by the subjects in the live presentation group than will be retained in the group which views the video presentation.

Method

Subjects

Forty-nine college undergraduates, (22 female and 27 male), from Graceland College in Lamoni, Iowa, participated in the study. The average age of the subjects was 19.5. Forty of the subjects were freshmen, six were sophomores, and one was a junior. These students had all received a $1,000 Presidential Merit Grant from the college and were participating in a series of leadership programs sponsored by the college. These students were identified by the college administration as the future student leaders of Graceland College.

On the day of the presentations, the subjects had participated in several leadership seminars spanning a period of six hours. Those workshops included topics such as cultural diversity, facing confrontational situations, time management, stress management,
teamwork, volunteerism, gender issues, and other leadership educational sessions pertinent to the day's activities. The Myers-Briggs Type Inventory was also administered to the participants. A lengthy discussion was held between the individuals administering the tests and the students. This test was not conducted for research purposes but to allow the students to understand their personalities.

A presentation titled "Careers 2000" was then given to the participants. This included information from the U.S. Department of Labor Bureau projecting the job market to the year 2005. Statistics revealed trends of growth and reduction for careers, the levels of education and experience needed for particular jobs, and the relationship of unemployment to education levels. The presentation lasted about fifteen minutes.

Although participants were required to take part in one of the two workshops, they were not required to complete the test administered following the presentations. After the test was completed and the materials were turned in, subjects were given the opportunity to ask questions of the presenter.
The facilities for the two presentations were similar in regard to lighting and seating. Although the aesthetics and size of room were different, all subjects were within fifty feet of the presenter or the television monitor.

**Presenter**

The author of this paper served as the presenter. Although not a professional in the field of career planning, he was experienced in presentations of this topic. He maintained an objective approach and did not alter either presentation in any way in order to prevent the results from being skewed. He dressed the same for both presentations. The video tape was made within two days of the live presentation.

**Materials**

A videotape presentation was made on a standard VHS video recorder prior to the day of the workshop. The recorded presentation was given on a nineteen-inch color television monitor. The same presentation was delivered to another group simultaneously in separate but similar facilities.
Procedure

Permission to conduct this study was obtained through the Vice-President of Student Affairs at Graceland College. Informed consent was obtained from the participating students prior to the presentations. The consent form also consisted of the student’s personal information regarding sex, age, and grade level. Subjects were informed that the study would be used to evaluate presentation styles and training materials.

In advance, a list of students who were to be participating in the workshop was obtained. Seventy-two students were expected to attend. Because of other commitments, twenty-three students were not able to participate in this study. Each subject was assigned to group A, video presentation, or group B, live presentation, by the respective letter at the top of the consent form. The subjects were randomly assigned to groups prior to the day of the presentation. Subject assignment was conducted in such a way that there was as close to an equal number of participants in each group as possible. Group A viewed the video-taped presentation. Simultaneously, group B was given the same presentation by a live
presenter who also made the videotaped presentation.

Upon completion of the presentations a performance test and attitude survey was administered to the subjects. There was no time limit to complete the survey. No interaction was allowed during the test and survey.

**Analysis**

The analysis was conducted in two parts. First, to produce evidence that there is a difference in satisfaction between the presentations. Using a five-point Likert scale, participants ranked survey items from one to five, respectively: (1) strongly disagree, (2) disagree, (3) undecided, (4) agree or (5) strongly agree.

Second, to examine the amount of knowledge gained by the subjects from the presentation, a survey of twenty multiple choice questions was given to the subjects. The scores of each test were then tabulated and the mean scores of the two groups were compared using a "$t$" test comparison.

**Results**

The Comprehension Test and the Satisfaction Survey were scored by this researcher. The mean scores for Group A-Videotaped presentation,
and Group B-Live Presentation, and the number of subjects in each group are shown in Table 1. The Satisfaction Survey included ten statements regarding the subjects' satisfaction of the career planning workshop. The scores were calculated on a five point Likert scale with 1 signifying the subject strongly disagreeing with the statement and 5 signifying the subject strongly agreeing with the statement. The Video Group (n=21) achieved a total mean score of all statements of 34.33, with a high score of 46 (50 possible) and a low score of 15. The Live Group (n=26) achieved a higher total mean score of all statements of 36.3, with a high score of 47 and a low score of 25. The group comparison, also shown in Table 1, indicates that the videotaped presentation did not create a significant difference, \( t = -0.964 \), \( \text{DF} = 45 \), \( p = 0.375 \).

The high scores for the two groups was similar but the low score for Group A was considerably lower than the low score for Group B. The Mean Score for Group B was approximately two points higher than Group A.
Table 1. Number of Subjects, Mean Scores, High Scores, and Low Scores for group A and B.

<table>
<thead>
<tr>
<th></th>
<th>Sample Size</th>
<th>Mean Score</th>
<th>High Score</th>
<th>Low Score</th>
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<tbody>
<tr>
<td>Group A</td>
<td>21</td>
<td>34.33</td>
<td>46</td>
<td>15</td>
</tr>
<tr>
<td>Group B</td>
<td>26</td>
<td>36.27</td>
<td>47</td>
<td>25</td>
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</table>

Significant Difference: \( t = -.964 \)   \( DF = 45 \)   \( p = .375 \)

Table 2 presents a breakdown of the Mean Score and Standard Deviation of each Satisfaction Statement for Group A and Group B.

Table 2. Means and Standard Deviations for Participant Responses on the Satisfaction Survey for Group A and Group B.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Group A</th>
<th>Group B</th>
</tr>
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<tbody>
<tr>
<td>1. The way the information was presented was interesting to me.</td>
<td>M 2.04</td>
<td>2.65</td>
</tr>
<tr>
<td></td>
<td>SD 1.07</td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td>2. This presentation strengthened my knowledge about careers in the year 2000.</td>
<td>M 3.76</td>
</tr>
<tr>
<td></td>
<td>SD 1.14</td>
<td>.77</td>
</tr>
<tr>
<td></td>
<td>3. The presenter showed knowledge of the subject matter.</td>
<td>M 4.38</td>
</tr>
<tr>
<td></td>
<td>SD .96</td>
<td>.72</td>
</tr>
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<td></td>
<td>4. The topic &quot;Careers 2000&quot; was conducive to today's activities.</td>
<td>M 3.62</td>
</tr>
<tr>
<td></td>
<td>SD 1.07</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td>5. The presentation was informative in regard to the future job market.</td>
<td>M 4.19</td>
</tr>
<tr>
<td></td>
<td>SD .75</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td>6. The information I obtained will assist me in selecting a career.</td>
<td>M 3.05</td>
</tr>
<tr>
<td></td>
<td>SD 1.20</td>
<td>1.20</td>
</tr>
<tr>
<td></td>
<td>7. Other individuals seemed receptive to the presentation.</td>
<td>M 3.00</td>
</tr>
<tr>
<td></td>
<td>SD 1.05</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>8. The room setting was a contributing factor to the success of the presentation.</td>
<td>M 3.29</td>
</tr>
<tr>
<td></td>
<td>SD 1.14</td>
<td>1.19</td>
</tr>
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Table 2 (continued)

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<thead>
<tr>
<th></th>
<th>Group A</th>
<th>Group B</th>
</tr>
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<tbody>
<tr>
<td>9. The presentation reinforced my need to obtain a college education.</td>
<td>M 4.33</td>
<td>4.35</td>
</tr>
<tr>
<td></td>
<td>SD .97</td>
<td>.75</td>
</tr>
<tr>
<td>10. I am satisfied with the presentation.</td>
<td>M 2.90</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>SD 1.24</td>
<td>1.18</td>
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</table>

The Mean Scores and Standard Deviation Scores for most of the questions are similar. All of the Mean Scores are within one point, with statement 1 and 10 indicating the most difference between the two groups, .61 and .6 respectively. All of the Standard Deviation Scores are within one-half a point with statement number 2 showing the most difference, .37, between the two groups.

An analysis of comprehension was performed on both groups. The Comprehension Questionnaire included twenty multiple choice questions. The correct answers were calculated for each test. The maximum score that could have been scored was twenty. Group A (n=21) achieved a total
mean score of all questions of 13.62, with a high score of 17 and a low score of 8. Group B (n=26) achieved a total mean score of all questions of 12.69, with a high score of 18 and a low score of 7. Table 2 shows that there was no significant difference in the presentations, \( t = 1.339 \), (DF =45), (p = .1).

<table>
<thead>
<tr>
<th></th>
<th>Mean Score</th>
<th>High Score</th>
<th>Low Score</th>
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</thead>
<tbody>
<tr>
<td>Group A</td>
<td>13.62</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Group B</td>
<td>12.69</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>Significance</td>
<td>( t = 1.339 )</td>
<td>DF = 45</td>
<td>p = .1</td>
</tr>
<tr>
<td>Variance</td>
<td>5.048</td>
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<tr>
<td>Standard Deviation</td>
<td>2.247</td>
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</table>

Table 3. Mean Score, High Score, Low Score, Significance, Variance, and Standard Deviation for group A and B.
Discussion

The results of the present study are found to be consistent with other studies regarding the used of videotaped vs. live presentations. Cohen, Ebling, and Kulik (1981) found that 74% of the studies of student achievement reported no significant difference between visual based and conventional teaching.

This researcher hypothesized that subjects who received a live presentation of information regarding career planning would be more satisfied than subjects who received the same information by viewing a videotaped presentation. In addition, it was hypothesized that the live presentation group would show more comprehension of the material presented than the videotaped presentation group. The results of this research show that no significance was found to support this hypothesis.

It is the opinion of this researcher that some conditions of this experiment may have prevented an accurate assessment of the desired measures. What follows is a discussion of possible factors influencing the results of this experiment.

It is possible that the sample size of the video group (n = 21) and the
live group (n = 26) was insufficient to achieve an accurate assessment of the effect of the presentation style of career planning. Had additional subjects participated in the study, results may have shown statistical significance.

Because all of the subjects were members of the leadership program at Graceland College, it is possible that the selection of subjects was biased. Because the leadership program is in its' first year, most of the subjects were freshmen or sophomores. The age of the subjects averaged under 19 years with virtually no difference in the average age of the two groups. The subjects were also the top students in their class which may have prevented a good representation of the total college population. A more diverse sample of college students may have shown significant difference between the two groups.

Although the presentations to the two groups went as planned, the subjects showed lack of interest in the workshops. It is possible that the subjects were fatigued because they had attended workshops and lectures for the previous six hours and may have had no great desire to listen to additional presentations. Although the subjects were not required to
complete the presentation evaluations, they may have felt obligated to stay and participate in the remainder of the days' activities.

An additional limitation of this study is that the presentations were given and surveys administered without regard to the subjects' individual learning styles. Some students may have a slower pace of comprehension because of learning disabilities. Other students may have such a high retention of material that they may have been bored with the information if they had been presented with it before. This may have been the case with the low score of 8 in the video group and the low score of 7 in the live group.

This researcher was trying to show that students would prefer to participate in a live presentation rather than watching the same presentation on a videotape. This researcher maintains his belief that the personal aspect of teaching should not be replaced by the television medium, although videotaped instruction seems to have its place in the classroom and in workshop and seminar settings. The use of videotaped career planning workshops will allow students to view presentations when they have the time or interest. This will allow students to be more
focused on the material being presented at a time convenient to them.

It is interesting to note that although Group A scored higher on the satisfaction survey than did Group B, Group A also scored lower on the comprehension test than did Group B. This seems to indicate that comprehension is not directly related to satisfaction. It is suggested that further research be conducted evaluating the relationship between satisfaction and comprehension using various styles of presentations. Ideally, more students of different ages and grade classification would be included in such research. This study further shows the need for continued research regarding styles of instruction in an educational environment.

This author suggests continued research be conducted in regard to collaborative learning television. Bruffee (1982) states "There is evidence that, contrary to popular assumption, television viewing and learning involves a high degree of social interaction. Collaborative learning television would promote learning by taking advantage of the social nature of watching television and the social nature of learning. Viewers would be organized into semi-autonomous learning groups so that
learning would occur through the focused conversation of a community of peers."

Collaborative learning is a term covering a number of pedagogical procedures that restructure the social relationships prevailing among people in any learning situation and between the people learning and their teacher. In collaborative learning, the teacher establishes conditions in which people can learn by working together in semi-autonomous groups of various sizes. The teacher designs appropriate tasks and establishes conventions within which the work will be done. People themselves govern the social relations that develop while they are learning. That is, the people doing the learning organize the work, do it together, and learn from each other in the process.

Bruffee believes that collaborative learning television would harness two of the most powerful change agents in modern society: self-help/mutual-aid group work and television. Collaborative learning applies the basic principle of self-help and mutual aid to education. Collaborative learning combined with television's power to shape personal response in a social context produces Collaborative Learning Television.
Bruffee's (1982) beliefs are based on explicit assumptions about how we learn and how television works as a medium of communication. "If we assume that learning involves the social justification of belief, not the assimilation of information, and that watching television is a social activity, then educational television must be restructured as collaborative learning television."

The use of videotape and television will continue to be an important instructional tool. It is vital that future research be conducted to match the audience with the type of instruction.
References


