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## A Comparison of Experiential and Classroom Learning Models in Teaching Health Problems of the Poor

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A COMPARISON OF EXPERIENTIAL AND CLASSROOM  
LEARNING MODELS IN TEACHING HEALTH  
PROBLEMS OF THE POOR

by

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Doctor of Philosophy

in

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UNIVERSITY OF UTAH GRADUATE SCHOOL

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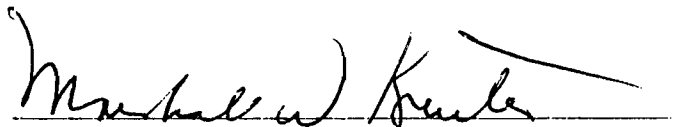
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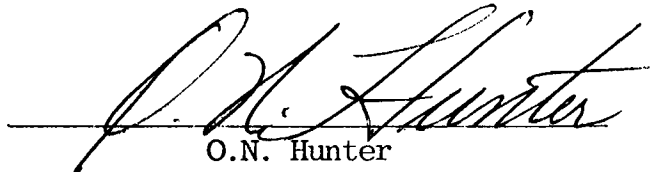
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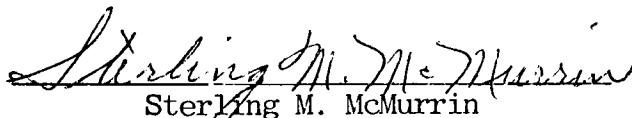
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## ABSTRACT

The general problem was to assess differences, if any, in selected areas of knowledge, attitudes and behavior among students exposed to a classroom model with students exposed to an experiential (community live-in) model in learning about health problems of the poor. Specific problems included: the selection of instruments, the development of methods and materials for teaching the classroom and experiential groups, and the measurement of students' knowledge, attitudes, and behavior related to the poor and their health problems.

Twenty-three students enrolled in a workshop entitled "Health Dilemmas of the Urban Poor" along with a student control group (N=15) participated in the study. Fifteen students enrolled in an experiential group and spent the majority of their time immersed in the community. Eight students enrolled in the classroom section and spent their time in the classroom only. Both groups studied the same content, relative to health problems of the poor - one group through direct experience and the other group vicariously. Following their "live-in" or classroom experiences both groups were separated for debriefing and problem solving.

The research design was classified as quasi-experimental. The level of significance for acceptance or rejection of the null hypotheses was set at the 0.05 level. Raw scores on all knowledge and attitude scales were

recorded for pre and post assessments. The data were then analyzed using a 2 x 3 analysis of variance design to assess treatment of groups and test replications. Post behavior measures included an unobtrusive behavior measure and a self-report behavior inventory which were conducted four and six months following the experience respectively.

The findings included:

1. Both the classroom and experiential group improved significantly ( $p < 0.01$ ) on knowledge gain between pre and posttest. No significant differences were found between the experiential and classroom groups but both were significantly different than the control group.
2. The classroom and experiential group both perceived the poor to be stronger following educational intervention ( $p < 0.05$ ).
3. The poor were perceived as healthier by the experiential group following immersion in the community ( $p < 0.05$ ).
4. In the experiential group, students were cooperating with state legislators in their learning endeavors. Following their interaction students in the live-in section demonstrated significant ( $p < 0.05$ ) attitude shift to perceiving the legislators as softer individuals and not as hard as earlier thought.
5. Medical doctors were perceived only by the classroom group to be less sensitive, more cruel, and less positive following

educational intervention ( $p < 0.05$ ).

6. Both the classroom and experiential group reported positive behavior commitment to the health problems of the poor although there were no differences between the groups.

## CHAPTER I

### INTRODUCTION

For years in educational literature, the notion of learning by doing has been universally accepted. Learning theorists have typically emphasized the importance of this concept to teachers and prospective teachers. Engrained in educational theory have been the concepts that learning is an active affair and teachers should create an environment which provides opportunities for the learner to be an active participant in the learning situation. Carl Rogers (1969) has suggested:

Much significant learning is acquired through doing. Placing the student in direct experimental confrontation with practical problems, personal issues, and research problems is one of the most effective modes of promoting learning [p. 162].

Further support for experiential learning has been offered by Dewey (1900), Rich (1962), Stapp (1970), Overcash (1971), Rillo (1971), and Weidner (1971). Unfortunately, support for the superiority of experiential learning over most traditional learning techniques has in most cases been based upon subjective observations rather than upon objective, scientific evidence. If educators in general and health educators in particular are to genuinely demonstrate improved teaching, they must select methods based on systematic measurement of data rather than intuition. One of the recommendations from The Report of the President's Committee on Health Education (1973)

urged support for:

. . . demonstration programs in health education that represent broad cross sections of people; which focus on objectives that are measurable: and that emphasize the prevention or moderation of illness or accidents which appear controllable through individual behavior [p. 29].

Accurately determining the efficacy of any teaching method has been extremely difficult due to the seemingly limitless variables which can affect the learning situation. Effective measurement is further complicated by the fact that human behavior is sensitive to a myriad of stimuli. In health education, the effectiveness of any teaching approach is dependent on the measurement of knowledge, attitudes and more importantly, behavior changes.

#### Statement of the Problem

The general problem was to assess differences, if any, in selected areas of knowledge, attitudes, and behavior among students exposed to a classroom model with students exposed to an experiential model in learning about health problems of the poor.

#### Specific Problems

An analysis of the general problem statement revealed several specific problems. They were:

1. To select and modify existing instruments which were valid and reliable in measuring selected areas of knowledge, attitudes, and behavior concerning health problems of the poor.



2. To develop and organize methods and materials for teaching the classroom group.
3. To develop and organize methods and materials for the experimental group.
4. To measure the change of students' knowledge concerning health problems of the poor.
5. To measure the change of students' attitudes toward health problems of the poor.
6. To measure the change of students' behavior related to health problems of the poor.

#### Definitions

Although most of the terminology used in this study was self-explanatory, the following terms seemed to warrant clarification:

1. Attitude: Operationally defined as the personal projection of a belief system toward any given object.
2. Behavioral Change Assessment: Two separate evaluative techniques were utilized. These were:
  - A. Unobtrusive Measure. A method of determining participants' action related to health problems of the poor which is unnoticed by the subject.
  - B. Open-Ended Questionnaire. An instrument used to determine the participants' involvement and interest with the

poor. Questions pertaining to donations, volunteer work, and additional learning which the participants may have initiated following the workshop.

3. Classroom Model: Refers to the in class method of presenting information in which the facilitator relied primarily on lectures, discussions, and audiovisual aids in teaching a class pertaining to the health problems and agencies which serve the poor.
4. Experiential Learning Model: A method in which the students were immersed in the community thereby acquiring first hand experiences with the health problems and agencies serving the poor.
5. Health Dilemmas: Refers to a variety of physical and emotional human health problems which included but was not limited to: health delivery, housing, environment, nutrition, family planning, mental health, education and enforcement.
6. Immersion: Placing students in an inner city area for an extended period so that they experience some of the health problems facing the poor.
7. Knowledge Test: An objective instrument which consisted of 17 multiple choice and nine completion questions which measured the students' information concerning health problems and agencies serving the poor.
8. Semantic Differential: A seven point Likert scale utilizing 15

bi-polar adjectives to measure attitudes toward the following concepts: Government, Children in General, Legislators, Medical Doctors, and the Poor.

9. Urban Poor: Those individuals living within the city whose personal income or the income of the family to which he belongs is inadequate to provide subsistence.

#### Delimitations

This study was delimited to:

1. The knowledge, attitudes, and behavior test results of 23 students who were enrolled in Health Science 675 W (Health Dilemmas of the Urban Poor Workshop) during the Summer Quarter, 1973.
2. The knowledge and attitude test results of 15 students randomly selected from other classes at the University of Utah during the Summer Quarter, 1973.
3. Classroom experiences on health problems of urban poor at the University of Utah.
4. Community experiences on health problems of the poor in Salt Lake City and Ogden, Utah.
5. Four days of either classroom experiences or community experiences and three days of debriefing and problem solving.

### Limitations

This study may have been limited by:

1. The size of the enrollment in Health Education 675W (Health Dilemmas of the Urban Poor) in which eight students participated in the classroom section and fifteen students in the experiential section.
2. The reliability and accuracy of the students' answers on the testing instrument.
3. The conditioning of the subjects' response to the same test on the pre and post assessments.

### Hypotheses

The following hypotheses were stated in the null form with the 0.05 level of significance established as the criterion for acceptance or rejection:

1. There would be no significant differences in pretest scores on knowledge between the experiential, classroom, and control groups.
2. There would be no significant differences between the pretest and posttest scores in knowledge in the experiential group.
3. There would be no significant differences between the pretest and posttest scores in knowledge in the classroom group.
4. There would be significant differences between the pretest and

posttest scores in knowledge in the control group. )

5. There would be no significant differences in posttest scores on knowledge between the experiential, classroom, and control groups.
6. There would be no significant differences in pretest scores on attitude between the experiential, classroom, and control groups.
7. There would be no significant differences between the pretest and posttest scores in attitude in the experiential group.
8. There would be no significant differences between the pretest and posttest scores in attitude in the classroom group.
9. There would be no significant differences between the pretest and posttest scores in attitude in the control group.
10. There would be no significant differences in posttest scores on attitude between the experiential, classroom, and control groups.
11. There would be no significant differences in selected post learning behaviors between the experiential, classroom, and control groups.

#### Research Design

The research design was classified as quasi-experimental. Internal validity was critical and dependent upon the validity and reliability of the instruments and consistency in their administration. External validity was not critical since conclusions were confined to the specific population studied.

The level of significance for acceptance or rejection of the null hypotheses was set at 0.05 level.

### Treatment of the Data

Raw scores on all scales were recorded for pre and post assessments. The data were analyzed using a 2 x 3 Analysis of Variance Design<sup>1</sup> to assess treatment of groups and test replications.

### Justification

The ongoing objective of education should be one of discovery. Every attempt should be made to determine the method or methods which provide the greatest educational benefits.

William B. Stapp (1970), Professor of Resource Planning at the University of Michigan, reviewed learning theories and selected various principles which were crucial to effective education. Some of these principles included:

Learning takes place through the active behavior of the student. It is what he does that he learns, not what the teacher does. The essential means of an education are the experiences provided, not the things to which the student is merely exposed.

Research shows little correlation between cognitive achievement and concern and values. Able students who achieve well in traditional "content-centered courses" do not necessarily demonstrate commitment to positive social goals [p. 38].

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<sup>1</sup>The 2x3 ANOVA performed in this analysis used the unweighted means solution for unequal N's and design. All posteority testing was performed on F values obtained from the ANOVA having significant values with  $p < 0.05$  (Winer, 1971).

Stapp concluded that, "environmental learning occurs best in a curriculum structure based on problem identification and solution, drawn around "encounters" (experiences) that focus the attention of the learner on the environment and link all relevant economic, social, technological and political information" /Stapp, 1970/.

Hawkins and Vinton indicated that the learning environment should provide access to relevant information concerning all of man's environment by enabling the learner to have direct experience out in the environment (Hawkins & Vinton, 1973). The conclusion by Stapp, Hawkins, and Vinton are consistent with most of the professional literature suggesting that learning best takes place when the student is actively involved in his environment.

Health problems of the poor was purposely chosen as subject matter for this study. Those in the helping professions or those who otherwise express genuine concern for the poor and their health problems sometimes find that their middle class value orientation and experiences tend to hinder meaningful progress. Haughton (Schorow, 1970) emphasized the importance of experiencing the cultural difference in all aspects of the health care system:

There is a wide gap between the level of medical knowledge and the level of delivery of medical care to large segments of the population. . . . Students and faculty must be exposed to the "real" world in order to "escape" from their middle class attitudes . . . we need to re-educate the public regarding how modern health services should be utilized. . . . One important step in the process is to involve consumers - patients in decision making at the "system" level / pp. 47-48/.

Haughton's concept of involvement suggests that before meaningful changes can occur in attitudes and decision making skills the learner (consumer) must be thrust into the reality of everyday experiences.

Furthermore, students who were enrolled in the "Health Dilemmas of the Urban Poor Workshop" in 1972 ranked their experience on a post course evaluation as one of their best ever. In addition the workshop was given the distinction of being the most innovative summer school experience in the Western United States.\* Based upon student ranking and professional recognition it seemed appropriate to evaluate the validity of the experience.

In support of the concept to explore new methods of learning and in defense of phenomenological method in behavioral research, Carl Rogers (1964) states:

I trust that I have made it clear that no method of knowing is infallible, that there is no royal road to scientific certitude. . . . Whatever approximations to the truth we are able to achieve in the behavioral science will not come automatically through following one approach to knowledge. . . . To limit oneself to considerations of the whole universe of inner flow of experiences, seems to me to be closing our eyes to great areas which confront us when we look at the human world [p. 117].

In the spirit of Rogers' remark, this study was an attempt to determine the efficacy of experiential learning.

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\*Presented to Dr. Marshall Kreuter by the Western Association of Summer Session Administrators, Summer 1972.



## CHAPTER II

### REVIEW OF RELATED LITERATURE

A review of educational literature revealed that considerable research has been conducted in the areas of attitude and behavior change. However, a minimum of research has been done in the area of experiential learning as related to attitude change and still less in relationship to behavior change.

This chapter has been divided into two sections. The first provides a brief overview of some of the theoretical rationale for experiential learning. The second and larger section represents a review of specific research studies involving selected outcomes related to non-traditional learning. The studies cited attempted to assess attitudinal, behavioral, or a combination of attitude and behavior shifts following non-traditional learning models.

#### Experiential Learning Theory

Historically, John Dewey's philosophy of education which emphasized the importance of learning by doing has had a most significant impact on modern education (Dewey, 1900). Pertaining to Dewey, Allport (1960) noted, "He more than any other scholar, past or present, has set forth as a psychological problem the common man's need to participate in his own destiny p. 181." Dewey's philosophy of learning by doing and his

contributions to active problem solving at the turn of the century has become a significant part of modern educational theory.

Other early educators philosophically supported the concept of learning by doing. Francis Parker condemned the teachers who were bound to the textbook and academic curricula or course of study of many schools because of their rigid emphasis on fixed qualities of skill and knowledge. Parker allied himself with Comenius, Pestalozzi, and Froebel in fostering the learning by doing concept (Van Til, 1971, p. 393). Gutek (1968) in reviewing the educational philosophy of Pestalozzi stated: "Pestalozzi was critical of traditional education that made a distinction between theory and action or in other words, separated thinking and doing p. 105." Comenius (Komensky, 1953) in discussing methods of implanting knowledge stated: "Impressions received through heedful observations are very lasting p. 143."

More recently, Hilgard (1958) suggested that in the learning process, active participation by the learner is preferable to passivity, such as listening to a lecture or watching a motion picture p. 485." Boy and Pine (1971), emphasizing the importance of the active learner concept state: "Learning is facilitated in an atmosphere which encourages people to be active. The learning process thrives when there is less teacher domination and talk and more faith that people can find alternatives and solutions which are satisfying to themselves p. 114." Finally, Edgar Friedenberg (Foshay, 1970) looks for the day "when you can't even tell education from living p. 22."

## Experiential Learning Studies

Various studies have been conducted relating attitude and behavior change to experiential learning. The following section has been subdivided into three areas reviewing studies related to: attitude change, behavior change, and a combination attitude and behavior change.

### Attitude Change

Zacker (1971) studied the effects of experiential training upon empathy, interpersonal sensitivity, cynicism and alienation in police recruits. A variety of attitude measures were given in a 13 week pre and post design. Utilizing a random selection of recruits, two groups were formed. Group A received experiential training which included group discussion and real-life stimulation riding in police cars. Group B received traditional classroom instruction in a broad range of behavioral and social sciences. Both groups had the same objective, that was to enhance their ability to understand and cope with interpersonal conflicts. There were no significant changes on any of the variables either between or within. The recruits in the experiential group judged their training to be more favorable than did recruits in the traditional classroom group.

Twomey and Kiefer (1972) developed and measured the effectiveness of experiences in human relation included in a basic nursing concepts course for custodial personnel in a State Hospital. The hypothesis of the study was that changes in the roles and attitudes of their personnel would affect the well-being

of the patients. Training consisted of field trips, communication theory, role playing, practice of acquired skills and group discussion. A questionnaire administered before and after measured positive attitude changes in benevolence, mental hygiene ideology, social restrictiveness, and interpersonal etiology. The results indicated that following training in interpersonal dynamic skills the participants demonstrated positive attitudes toward their patients.

Polley, McAllister, Olsen, and Wilson (1971) developed and evaluated a training program at two community mental health centers. Their program philosophy was aimed at increasing knowledge and maximizing involvement and participation by the trainees. The training involved three phases: I. General Mental Health Orientation, II. In-hospital Orientation, III. Case-work and case-management. Phases I and III utilized traditional classroom techniques of lecture, audiovisual, groups discussion, and case presentation. Phase II was considered largely successful in that the trainees actually experienced what it is like to get caught up in the labelling and identification process of commitment and hospitalization in a state hospital. Although no statistical analysis was reported, the greatest influence in attitude and perception was observed through the in-hospital orientation.

Madison (1968) focused his attention on what he termed a deprived community and its system of health services. An attempt was made to expose future health professionals to the deprived community and its system of health services rather than a health service institution and its community. Medical, nursing, and other students worked with medical college faculty and

preceptors in several cities around the U.S. in student-planned projects. Activities centered in six main areas: (1) community action agencies, (2) community psychiatry, (3) emergency room advocates, (4) medical research, (5) Operation Head Start, and (6) preceptorships. The effectiveness was measured by the project's educational value. The students initially viewed the primary goal as community action, but by the end of the summer, the majority accepted the program as worthwhile. Madison concluded that participants realized that their viewpoints, and attitudes were changing due to experiences and environments that were new and stimulating.

Smith (1943) found a substantial increase in favorable attitudes toward Blacks among Columbia Teachers College students who spent two weekends on guided tours of Harlem. The tours included a number of social gatherings arranged so as to be enjoyable for the students and to emphasize the high culture level of their Black hosts. In a similar study involving inter group contact, Mussen (1950) reported no change in overall direction of attitudes toward Blacks among white boys in an interracial camp and an interracial play center respectively. As a result of the camp study, it was concluded that changes in individuals did take place but changes to the group as a whole did not take place. The changes in attitude that did take place were closely related to aggressive needs, but not to the overt expression of aggression in this well regulated situation.

Greenberg, Pierson, and Sherman (1957) attempted to test several single-session education techniques to determine the effectiveness of changing

prejudice attitudes. The single-session techniques used included one lecture, one debate, and one discussion. The California E-Scale\* was administered to a group of college students before and after the educational techniques: (1) debate on the topic of integration in public schools, (2) lecture on the dynamics of prejudice, (3) "buzz-session" discussion, (4) control group. Although no significant differences were reported, the widest difference in attitude change was found between the discussion and lecture groups. The attitudes moved in a positive direction among the discussion groups, but in a less desirable direction in the lecture groups. Single-shot attempts have little value in completely reducing prejudice attitudes: group therapy and discussion tend to be more effective in changing attitudes than the traditional lecture method. The authors concluded that the more involved the student becomes in the learning process the greater the attitude shift.

Baty (1970) examined the effect of exposure to cultural-social-economic diversity on selected attitudes of elementary school teachers by investigating the effects on teacher tolerance and optimism to exposure to (1) the usual classroom situation and (2) an inservice training program. The research was conducted as a field experiment using a pretest-posttest control groups design with replication. A community with a Mexican-American minority population in the Southern Bay area of California was selected. The training program was designed to increase the teacher's understanding of the children's cultural

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\*Modified six-point Likert Scale consisting of 30 statements to which the subjects responded by varying degrees of agreement or disagreement.

background, and as a result, assist the teachers in their efforts to increase the children's self-esteem. Results were significant at the 0.05 level indicating that teachers with more than one year's experience with disadvantaged children were more optimistic in their approach, and that the training program made participants more liberal in their outlook toward the children.

Livingston (1970) evaluated changing attitudes following the simulation game "Ghetto" and attempted to determine whether effectiveness was associated with the personal characteristics of the players. The entire homogeneous senior class in a boy's Catholic high school in Baltimore participated in role playing. A simple, one-group pretest and posttest questionnaire study was conducted as a part of a teaching unit on poverty in eight social studies classes during four 55-minute periods. A pretest self report item measured personal and vicarious experiences with poverty. The results were significant at the 0.05 level indicating that the students' attitudes were more favorable after the game than before. However, no increase in factual information and a small decline in interest was measured. In addition, attitude change was positively correlated with the vicarious poverty experience.

In a similar study utilizing the simulation "Ghetto", Kidder (1971) examined physiological and behavioral indices of emotional arousal and mood during performance in the simulation game. The attitudes recorded were those of the 15 undergraduate players toward the consequences of living in a ghetto. The results provided some support, although non-significant, to the hypothesis that there will be attitude change following the game and the change

being affected by the player's emotional involvement in the game as measured by heart rate and self report mood. The author reported that the complexity of the relationship called for more controlled experimentation.

Several studies have examined the effect of role playing on attitude change. Clore and McMillan (1971) assessed the effects of emotional role playing on interpersonal attitudes toward the disabled. Role playing consisted of traveling about the campus in a wheel chair for an hour. Results indicated that, compared to the control experience, both direct and vicarious emotional role playing led to more positive (significant 0.05 level) responses: (1) to a specific disabled person; (2) to a series of issues concerning disabled students in general; and (3) to a disguised attitudinal measure given by telephone four months later. The concepts of empathy appeared more adequate than dissonance for understanding the disabled.

Culbertson (1957) considered the factors of personal involvement in attitude change. She measured the attitudes of junior college students toward Blacks in general and toward Black-White housing integration specifically both before and after role playing sessions. The role playing was conducted in groups of six each, with half the students as performers and the other half observers of respective role players. Based on the use of chi square values, significant differences at the 0.0005 level of confidence were found between the role players and control group and in favor of the role players. Significance at the 0.0045 level was also found between role observers and the control groups and also in favor of the role players. Consequently, far



greater proportions of both the participants became more favorable toward Blacks and toward racial integration in housing; however, the role players shifted more than the observers.

Taylor and Smith (1972) examined the effect of anticipating the continuation of role playing on attitude change. The subjects were females recruited from an introductory psychology class at Brigham Young University. Utilizing Osgood's Semantic Differential, the subjects were pre and posttested. The subjects were asked to play specific roles concerning an enforced dress standard. They then were introduced to the role playing session in a positive or negative manner, and half of them were led to believe they would maintain their role for one week. Based on the analysis of covariance technique, subjects expecting that their role playing would continue through a second session changed their attitudes (significant at 0.05 level) more than did the subjects who expected their role to end with the first meeting.

Matefy (1972) studied attitude changes induced by role playing as a function of improvisation and role-taking skill. The subjects were asked to write a paper and present arguments against the common belief of the advantage of a medical check-up, or the benefits of penicillin. Subjects were divided into guided and unguided role playing groups, and simple passive reading roles. Guided improvised role playing manifested: (1) greater agreement with the role played position than the unguided improvising role players, (2) greater attitude changes than the passive readers, and (3) a more favorable attitude

toward the counternorm position than did the guided nonimprovising role players. The results were all significant at the 0.01 level. The major finding was that the role requiring the greatest improvisation did not produce the anticipated attitude change, and some degree of familiarity with the role was deemed necessary for a maximum attitude change. Successful enactment requires a knowledge of the precepts, expectations, and the demand of the role enacted. Active participation is also necessary to facilitate attitude change.

#### Attitude and Behavior Change

Harmon (1973) assessed knowledge and attitude differences between students exposed to a traditional classroom approach with students exposed to an experiential learning approach. He involved 38 students enrolled in a Human Ecology course.

Results indicated no significant differences between the two groups but there were significant differences in knowledge and attitudes between the pre and post assessments within the experimental and control groups. Although no significance was found between the two groups, the author suggested that limitations inherent in the study may have affected the outcome. Harmon contended that the length of the course, the limited range of the attitude scale, and the need to further examine outcomes beyond knowledge and attitudes, and perhaps behavior change and problem solving should be assessed in future studies.

Diamond (1971) initiated an exploratory project designed to facilitate non-violent interactions between activist students and police. A total of 30 policemen and 161 volunteer college students, of whom 92 served as no-treatment control group, were involved. The effects of three possible types of contact were studied: (1) squad-car riding; (2) informal dinners and "rap" sessions; and (3) encounter groups. Questionnaires which assessed attitudes and self-reported behavior toward police, as well as knowledge of the policeman's role, were administered to student subjects prior to and following the experimental conditions. Unfortunately this study did not utilize a formalized statistical design. However, significant changes in both student and police attitudes were reported to have resulted from their interaction under all three conditions. For example, police became significantly less likely to view students as taking drugs only to escape reality; and students became significantly more likely to disagree with statements asserting that police are "rigid", "calous", "insensitive", as well as "biased against minority races and long haired males". Finally, changes in students' intended behavior toward police in the direction of becoming more cooperative and less fear arousing were found. It was concluded that seemingly polarized groups, such as police and students can increase respect and understanding for one another when provided with a proper sort of interactional environment. Significant changes in both student and police attitudes and behaviors were reported to have resulted from their interaction under all three conditions. It was concluded that seemingly polarized groups, such as police and students, can increase

respect and understanding for one another when provided with a proper sort of interactional environment.

Bennett (1965) assessed the comparative effectiveness of an experimental field method and a traditional classroom method in teaching ecology to seventh graders. Five classes were utilized containing a total of 132 students who were grouped according to reading level and assigned to different groups: (1) Group I received the traditional classroom teaching method and (2) Group II received the experimental field experience. It was reported that the experimental field method did not prove to be more significant than the traditional classroom method in causing an increase in learning selected science content. Those in the experimental section did as well as those in the classroom section. The only exception was that the classroom group did better (significant at the 0.01 level) in a comprehensive knowledge test. There were no significant differences between groups in attitudes. The conclusion drawn from the study was that the classroom group did have a significant advantage concerning the content learned. However, according to the author, to take the definite position that the statistical conclusion is completely true would fail to recognize several other factors which contribute to success in learning. Bennett concluded that perhaps there are educational goals other than the acquisition of specific factual knowledge and that there are other objectives of education that may contribute to the success of one method over another which are not revealed in the study.

Thompson and Frederick (1957) compared the effectiveness of a pupil-centered vs. a teacher-centered pattern of teaching vocational agriculture. In the conventional pattern, the teacher dominated by deciding what problems would be studied and how they would be studied. The students in the experimental pattern became the key figures by individually deciding what problem he would be doing his own research and formulating and carrying out their plans. Eleven teachers and 91 students took part in the experimental group and eleven teachers and 128 students were in the conventional group. The results indicated significant gains in mean scores measuring the acquisition of knowledge and principles. There were no significant differences in attitude and problem solving ability between the groups.

Janis and Mann (1965) determined the effectiveness of emotional role playing in modifying smoking habits and attitudes. Two groups were utilized with one group enacting the role of a patient informed about one's own cancer vs. someone merely listening to a tape of the role enactment. The experimental (role playing) group demonstrated differences (significant at the 0.01 to 0.05 level) on various attitude measures over the control group. The enacted group all demonstrated a significant difference at the 0.05 level over the control group in a two week self-report smoking behavior instrument (number of cigarettes smoked daily).

Hunt (1969) evaluated the effect of the Upward Bound Programs on the attitudes, motivation, and academic achievement following an eight week educational live-in experience on a college campus. In the study a comparison

was made between black and white students during the academic year preceding the experience. Significant increase at the 0.01 level were made in motivation. Further results were significant at the 0.05 level indicating positive changes in future orientation, self esteem, and internal control which was linked to better academic achievement.

Eiszler (1973) attempted to determine the extent to which the effectiveness of migrant education was reflected in the measurable attitudes and behavior changes in the pupils enrolled in these programs. The findings indicated that the migrant education program effected changes in pupil performance on a test (pre-post) used to measure proper usage of the English language. The binomial test was applied to the data with a resulting z score of 5.11 which was considered significant in this study.

#### Behavior Change

Wise (1970) compared achievement of elementary school youngsters exposed to an outdoor versus those exposed to an indoor learning modality. Three fifth grade classrooms were utilized in each school which included 261 students divided into: (1) direct experience, (2) outdoor classroom, and (3) indoor classroom. Both students and teachers were randomly assigned to treatments. On the basis of the statistical analysis it was concluded that there were no significant differences among the three treatment means on either the posttest or retention scores concerning science knowledge and comprehension. Despite a lack of statistical significance student enthusiasm for

the direct experience and outdoor classroom was noted.

Finally, Anderson (1970) utilized a social simulation game "Consumer," to study the effectiveness of simulation in teaching facts about: installment, buying, how to compare available sources of credit, and how to recognize the best credit contract. The entire twelfth grade class was divided into ten classes and assigned into experimental and control groups. The experimental groups played two games of "Consumer" which lasted for six class meetings while the control group had one curriculum unit on consumer use of installment contracts. There was no significant difference between simulation and conventional approaches with regard to factual learning. However, simulation was more successful in producing credit-comparison shopping behavior on the "To Buy a Car" test. The results suggested that simulation games are better able to produce behavioral changes than conventional classroom techniques.

#### Summary

Historically, John Dewey (1900), Francis Parker, Comenius, Pestalozzi, Froebel (Van Til, 1971) all supported the notion of learning by doing. More recently, Hilgard (1958), Friedenberg (Foshay, 1970), Boy and Pine (1971) also emphasized the importance of the student becoming actively involved in the learning process.

The literature pertaining to experiential learning provided strong support for learning by doing in attempting to create attitude and behavior

change. Bennett (1965); Madison (1968); Wise (1970); Polley, McAllister, Olsen, and Wilson (1974); Diamond (1971); Zacker (1971); Twomey and Kiefer (1972); and Harmon (1973) all attempted to incorporate experiential learning activities in their educational programs. For the most part, their results were significant in support of experiential learning as compared to traditional techniques. Smith (1943), Hunt (1969), Baty (1970), and Eiszler (1973) used immersion techniques similar to the present study and were not unanimous in demonstrating attitude and behavior shifts in favor of the experiential method. Studies by Culbertson (1957), Janis and Mann (1965), Clore and McMillan (1972), Taylor and Smith (1972), and Matefy (1972) conducted studies which showed positive learning results from role playing methodology. Finally, Anderson (1970), Livingston (1970), and Kidder (1972) demonstrated positive change as a result of involving subjects in simulation games.

A summary of the findings reported in this chapter does not in each instance reflect statistical significance in support of experiential learning. As Kidder (1972), indicated the complexities of his study and called for more controlled experimentation, Harmon (1973) emphasized the need for the development and utilization of more comprehensive instruments. Despite the lack of consistency to support one learning modality over others, and the limitations inherent in the studies discussed, authors continue to voice their intuitive support for the value of direct experience, role playing, and simulation.



## CHAPTER III

### PROCEDURES

This chapter includes a discussion of both preliminary and operational procedures. The preliminary procedures were those undertaken prior to the data-gathering phase of the study and the operational procedures were those involved in the data-gathering phase of the study.

#### Preliminary Procedures

The preliminary procedures included:

1. Initiation of "Medline" and "Dialog" searches for literature pertinent to this research.
2. Obtaining permission from the Health Science Department at the University of Utah to utilize the students in Health Education 675 W, as subjects.
3. Receiving permission from the "Human Subject for Study Committee" to conduct research.
4. Contacting health and health-related agencies within the communities (Salt Lake and Ogden, Utah) to solicit their cooperation.
5. Construction of an instrument to measure knowledge concerning health agencies and the services available to the poor.
6. Selection of appropriate measures pertaining to attitudes concerning

the poor.

7. Development of appropriate measurement for determining behavior changes related to health problems of the poor.
8. Development of classroom and experiential learning models.

Initiate a "Medline" and "Dialog" Search for Literature Pertaining to This Research

To ascertain that such a study has not previously been conducted and to gather additional literature related to the problem, two computerized searches were initiated. The Medline search provided a comprehensive review of thousands of medical journal articles that may have been pertinent to the study. The "Dialog" search rendered a thorough investigation of educational, sociological, and psychological journals. Both reviews indicated that no similar studies have been conducted. The searches also provided valuable resource bibliography.

Obtaining Permission from the Health Science Department at the University of Utah to Utilize the Students in Health Education 675W as Subjects

Permission to conduct this study was granted by Marshall Kreuter, Ph.D., Health Science Coordinator and Workshop Director, and Dr. O. N. Hunter, Dean, College of Health.

Receiving Permission from the "Human Subjects for Study Committee" to Conduct Research

Since this study utilized students at the University of Utah, it was necessary to obtain permission from the Review Committee for Research

with Human Subjects. In addition to the research proposal, a brief form explaining the procedures which may have affected human subjects together with an outline of the protective measures concerning their rights was submitted to the Committee. Following the review by the committee permission was granted to conduct the study. (A copy of the proposal form and committee approval are in Appendix A.)

#### Contacting Health and Health-Related Agencies to Solicit Their Cooperation

In planning the workshop experience, various health and health-related agencies were contacted. The workshop purpose and format were explained to representatives from each agency in an effort to solicit their cooperation. Since the participants would be spending three nights and four days in the community, the Salt Lake County and Ogden Sheriff's Departments were contacted and appraised the planned live-in experiences. The respective law enforcement agencies were very cooperative and recommended that identification cards be made for the participants to legitimize their actions and for safety reasons. (A facsimile of this card can be found in Appendix B.) After canvassing and interviews, forty-two different agencies in Salt Lake City, and Ogden, Utah, agreed to participate in the project (Appendix C).

#### Construction of a Knowledge Examination

In order to assess the knowledge of the participants concerning services provided by various health care agencies, 17 multiple choice items and nine

completion items were constructed (Appendix D). Questions were derived from pamphlets obtained from the agencies and were analyzed by a panel of judges as to (1) clarity, (2) relevance of questions to agencies primary functions, and (3) non-overlapping properties with other questions. The panel consisted of two health educators, one psychologist, and a sociologist who did concur that the test did indeed measure knowledge of the content covered in the course.

#### Selection and Adaptation of Appropriate Attitude Measures

In an attempt to measure participants' attitudes toward the poor and toward selected others typically concerned with the problems of the poor, various attitude measures were examined. Because of well-established validity and reliability factors (Osgood, Suci & Tanenbaum, 1957, Chap. 4) and flexibility and ease of administration the semantic differential was selected as the most appropriate scale for measuring selected attitudes. "The semantic differential is proposed as an instrument for measuring learning; ideally, therefore, we should correlate semantic differential scores with some independent criterion of meaning -- but there is no commonly accepted quantitative criterion of meaning" [Osgood, Suci & Tannenbaum, 1957, p. 140].

The Semantic Differential utilized a seven-point Likert Scale with the flexibility to select the appropriate concepts and scales. In the present study the semantic differential was used to measure the meaning that the participants held for five specific concepts. The concepts were: government, children in

general, legislators, medical doctors, and the poor. Attitudes concerning the concepts were assessed through the selection of 15 bi-polar adjectives (Appendix E).

Adjectives selected for this study were concerned with evaluation, potency, and receptivity. Evaluation refers to the human judgment that a person has for another person or group. Under the evaluation factor the following adjectives were selected: kind/cruel, graceful/awkward, positive/negative, important/unimportant, clean/dirty, good/bad, successful/unsuccessful, pleasurable/painful, healthy/sick, beautiful/ugly, kind/cruel, and wise/foolish. The second factor selected was potency. Potency refers to power and the things associated with it such as size and toughness. Adjectives selected under this variable were strong/weak and hard/soft. Receptivity was the third factor and refers to how another person or group is received. Adjectives selected under this factor were sensitive/insensitive and interesting/boring.

#### Development of Appropriate Measurement Techniques for Behavior Changes

Two separate evaluative techniques were utilized to assess possible behavior changes within and between the groups. These were:

1. Unobtrusive Measure. The measurement of human behavior and attitudes has in the past been subject to error mainly due to (1) the "guinea pig effect" or awareness of being tested, (2) role selection and the subsequent demands placed on the subject, (3) practice effects caused by retesting, and (4) response sets or the

tendency of respondents to frequently endorse a statement than disagree with its opposite (Webb & others, 1970, pp. 13-20). Therefore, it has been suggested by Webb, Campbell, Schwartz, and Sechrest not to rely only on questionnaires and interviews for an assessment of possible behavioral change. They have recommended the utilization of multiple measurement devices including unobtrusive measures (Webb, Campbell, Schwartz & Sechrest, 1970).

To incorporate an unobtrusive measure in the study, the West-side Family Market (emergency food store for poor people in Salt Lake City) was selected as the vehicle. Permission to send a letter requesting help to the participants was gained from the director, Reverend James Merrill. A letter was sent to all the participants four months following the workshop and a follow-up letter was sent a month later. Both letters included a stamped self-addressed postcard for their response. The letter requested the participants' help in donating food or establishing a food collection center in the neighborhood for the needy. (Appendix F contains a copy of initial letter and follow up.)

2. Open-Ended Questionnaire. A more direct form of determining the participants' behavior was sent six months following their workshop experience. The two-page open-ended form requested information pertaining to donations, personal involvement, and

personal interest regarding the health problems of the poor.

The form attempted to determine whether or not their involvement with the poor and/or health increased, remained the same, or decreased, and also attempted to assess their personal commitment for involvement in the future. (Appendix G contains letter and inventory.)

#### Develop the Content for the Experiential and Classroom Models

In the development of both teaching approaches it was necessary to define specific course objectives. Those objectives were:

1. To increase the students' awareness of those health problems unique to the poor.
2. To increase the students' awareness of the health agencies which service the indigent.
3. To create knowledge, attitude, and behavioral changes among the participants.

Based on these objectives specific experiences were selected for both groups. Every attempt was made to keep the course for both groups as similar as possible throughout the study. (A copy of course objectives and the grading policy for both courses is included in Appendix H.)

#### Operational Procedures

The operational procedures were those involved in the data-gathering phase of the study and included:

1. Administration of the testing instruments to the students in the classroom, experiential, and control group. The testing procedures included:
  - a. Pre- and post-knowledge exam
  - b. Pre- and post-attitude scales
  - c. Post-behavioral measures
2. Implementation of programs.

Administration of the Testing Instruments to Students  
in the Classroom, Experiential, and Control Groups

The pre testing of knowledge and attitudes was conducted on the first day of the Workshop (June 4, 1973). Both the experiential and classroom groups received the same instructions pertaining to the taking of the instruments. The participants were not randomly assigned since they had their choice of sections (experiential or classroom). The groups utilized were the groups at hand. The control group was randomly selected from students in other summer school classes at the University of Utah during Summer Quarter, 1973. The posttest instruments (knowledge and attitudes) were administered on June 13, the final day of the workshop. Four months following the workshop (October 13, 1973) the unobtrusive behavior measures (Appendix F) was sent to all the participants and a control group randomly selected from the student directory. Two months later (January 13, 1974) an open-ended behavior questionnaire was sent to members of the classroom and experiential groups (Appendix G).



Raw scores from all knowledge and attitudes was recorded and then analyzed by using a 2 x 3 Analysis of Variance Design<sup>1</sup> with treatment (experiential, classroom, and control) and replications (pre and post). The ANOVA performed on the data had one between factor (treatments) and one within factor (pre - post). Descriptive statistics were used to describe the data obtained from the behavioral measures.

### Implementation of Programs

On the first day, both the classroom and experiential groups received the same introductory orientation (Appendix I). At the end of the day the groups were separated for more specific directions. All participants received the same packet of readings which were compiled from a variety of periodicals and books. (A copy of the bibliography is included in Appendix J.) From day two through day five, the groups were completely separated. During the first phase of the workshop, Group I, Experiential Group, was exposed to experiences within the communities of Salt Lake City and Ogden, Utah. (Appendix K contains a copy of sample itinerary.) Group II, Classroom Group, was given experiences within the classroom which included films, lectures, small groups, and guest speakers from various health and health-related agencies. (Appendix L contains a copy of classroom program.) The major difference between the two groups, therefore, was one of immersion. That is, the experiential group

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<sup>1</sup>The 2 x 3 ANOVA performed in this analysis used the unweighted means solution for unequal N's and design. All posteriority testing was performed on F values obtained from the ANOVA having significant values with  $p < 0.05$  (Winer, 1971).

was immersed into the community and actively experienced the health dilemmas of the poor and health delivery agencies; the classroom group, on the other hand, experienced the problems and agencies through conventional teaching modalities.

The experiential and classroom groups consisted of mainly university students from a variety of health and other helping professions. In addition, state legislators and community participants (poor) were recruited and took part in the experiential group. To insure similar interaction each live-in team consisted of three students and at least one community participant and legislator. The makeup of the classroom group was similar with the exception of involvement by state legislators.

The second phase of the workshop was similar for both groups and consisted of debriefing, summarizing, developing recommendations for possible legislative proposals, and post-testing. To increase internal validity both groups were physically separated during the debriefing and summary phases. On the first day of the debriefing phase both groups reviewed and summarized their experiences of the first week. In the debriefing process tape recorders were utilized to provide an anecdotal record of their experiences. On the final two days the groups used the "brainstorming" technique to critically review the strengths and weaknesses of the agencies. (Appendix M and Appendix N contain format and findings.) In addition, both groups were involved in developing legislative proposals and community action plans for future health delivery changes (Appendix O).

## CHAPTER IV

### ANALYSIS OF DATA

The data reported in this chapter was obtained from the knowledge, attitude, and behavioral measures of students in three groups: Experiential, classroom, and control.

The two-way analysis of variance was used to test the hypotheses stated in Chapter I. If a significant difference was found for any variable at the 0.05 level, the Newman Kuels Multiple Range Test was utilized to determine where the significance was located.

Analysis of the data as presented in this chapter is presented in the following order:

1. Knowledge
2. Attitude toward poor
3. Attitude toward legislators
4. Attitude toward medical doctors
5. Unobtrusive behavior
6. Self-reported behavior.

#### Knowledge

The first five hypotheses all pertained to comparisons of group mean scores on the knowledge test for the experiential, classroom, and control

groups. For convenience, those hypotheses are restated below:

- |              |                                                                                                                                    |
|--------------|------------------------------------------------------------------------------------------------------------------------------------|
| Hypothesis 1 | There would be no significant difference in pretest scores on knowledge between the experiential, classroom, and control groups.   |
| Hypothesis 2 | There would be no significant differences between the pretest and posttest scores in knowledge in the experiential group.          |
| Hypothesis 3 | There would be no significant differences between the pretest and posttest scores in knowledge in the classroom group.             |
| Hypothesis 4 | There would be no significant differences between the pretest and posttest scores in knowledge in the control group.               |
| Hypothesis 5 | There would be no significant differences in posttest scores on knowledge between the experiential, classroom, and control groups. |

Tables 1 and 2 present the data from the knowledge examination from all three groups. The  $F$ -ratio for the main effects of the groups (Table 1) was significant at the 0.01 level. The Newman Keuls Test indicated that the combined pretest and posttest mean scores of the experiential group and classroom group were significantly higher than the control group mean (Table 2).

Table 1  
Analysis of Variance, Knowledge Exam

Source	SS	df	MS	F*	P
Treatment (Groups)	357.1892	2	178.5946	7.155	.01
Error Between	873.6167	35	24.9609	---	---
Replications (Tests)	146.6173	1	146.6173	31.1005	.01
Treatment X Replications (Groups X Tests)	83.7949	2	41.8975	8.8873	.01
Error Within	165.0002	35	4.7143	---	---

\*F-ratio based upon 2 and 35 df must be 5.27 or larger to be significant at the 0.01 level. F-ratio based upon 1 and 35 df must be 7.41 or larger to be significant at the 0.01 level.

Table 2  
Summary of Pretest, Posttest, and Cell Sizes  
for Knowledge Examination

Group	Pretest	Posttest	Mean Difference	N
Experiential	14.200 <sub>b</sub>	18.600 <sub>a</sub>	4.400	15
Classroom	13.123 <sub>bc</sub>	17.627 <sub>a</sub>	4.504	8
Controls	11.267 <sub>c</sub>	11.067 <sub>c</sub>	.200	15

Note: Means having common subscripts are not significantly different from each other at the 0.05 level using the Newman Keuls Test.

The  $\underline{F}$ -ratio for the main effect of Tests was significant at the 0.01 level indicating that at least one group was significantly different in knowledge of the poor from pretest to posttest. The posttest mean score was significantly greater than the pretest mean score.

Computation of the  $\underline{F}$ -ratio for Groups x Tests was also significant at the 0.01 level. The Newman Keuls multiple means test revealed that the pretest knowledge score in the experiential group was significantly different ( $p < 0.01$ ) than the pretest knowledge score in the control group. Significant differences ( $p < 0.01$ ) occurred from pretest to posttest in the experiential and classroom groups. Also, the posttest knowledge scores in the experiential and classroom group were significantly greater ( $p < 0.01$ ) than the posttest score in the control group (Figure 1).

Analysis showed that the control group was significantly different ( $p < 0.01$ ) than the experiential and classroom groups on pretest knowledge scores. Therefore, the first hypothesis was rejected. The posttest knowledge scores for the experiential group and classroom groups were significantly greater than the pretest scores ( $p < 0.01$ ). Therefore, hypotheses two and three were also rejected. In the control group, the pretest and posttest knowledge scores were statistically equivalent resulting in the acceptance of hypothesis four. Finally, the posttest scores of the experiential and classroom groups were significantly greater ( $p < 0.01$ ) than the posttest scores in the control groups; thus, hypothesis five was rejected.

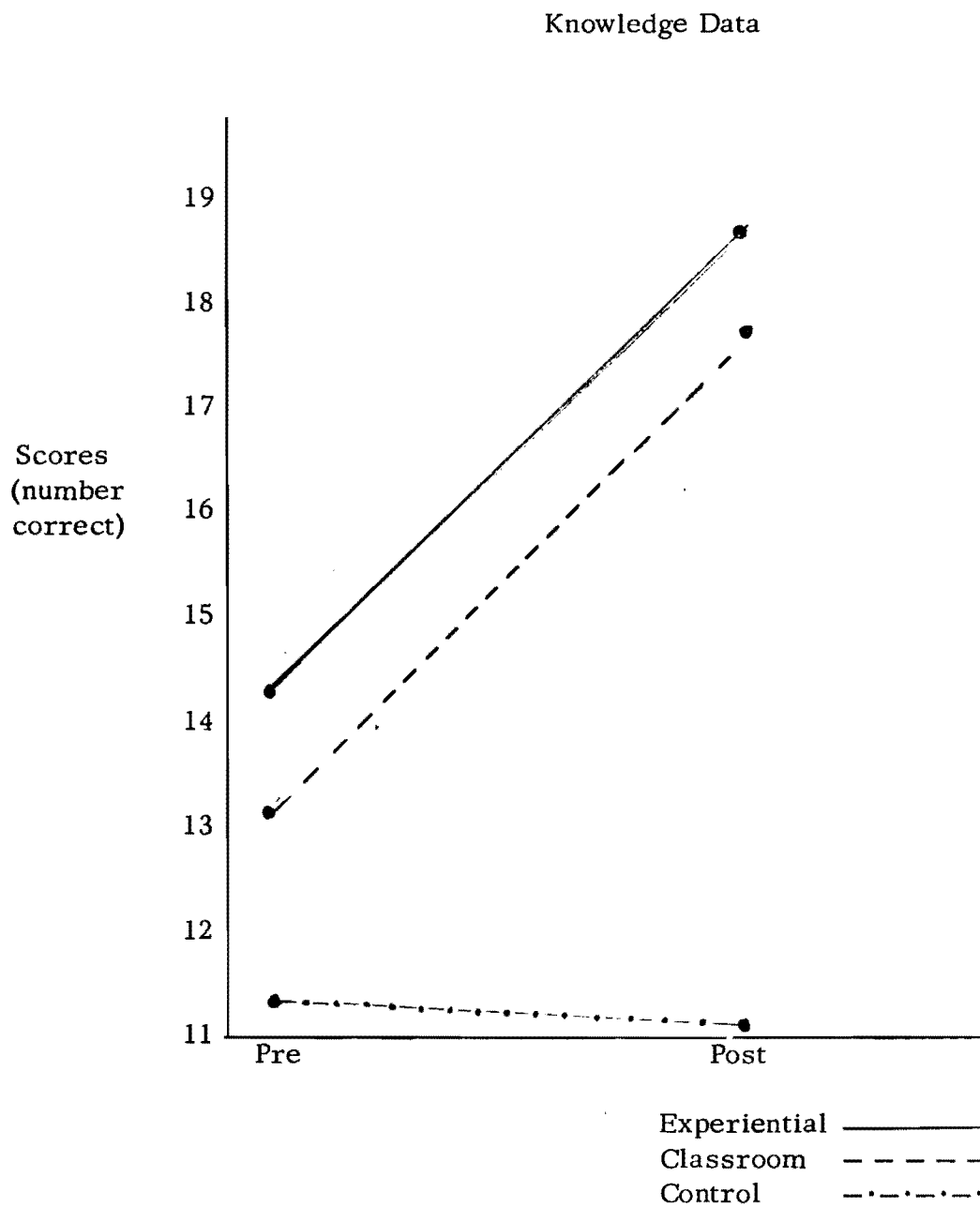


Figure 1. Pretest, Posttest Knowledge Examination

Attitudes

The second five hypotheses all pertained to comparison of group mean scores on the attitude test for the experiential, classroom, and control groups.

For convenience, those hypotheses are restated below:

- |               |                                                                                                                                   |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Hypothesis 6  | There would be no significant differences in pretest scores on attitude between the experiential, classroom, and control groups.  |
| Hypothesis 7  | There would be no significant differences between the pretest and posttest scores in attitude in the experiential group.          |
| Hypothesis 8  | There would be no significant differences between the pretest and posttest scores in attitude in the classroom group.             |
| Hypothesis 9  | There would be no significant differences between the pretest and posttest scores in attitude in the control group.               |
| Hypothesis 10 | There would be no significant differences in posttest scores in attitude between the experiential, classroom, and control groups. |



"Attitude," as used in this study, was measured by examining the belief system held toward five sub-concepts. These concepts were: government, children in general, legislators, medical doctors, and the poor. In order to reject any of the hypotheses related to attitude, all five concepts had to reflect statistical differences. If comparative group means for at least one of the 15 bi-polar variables for each concept showed significant differences it would simultaneously reflect significant differences in group attitudes toward a given concept. Since there were no instances where significant differences existed for all five sub-concepts, all of the null hypotheses related to attitudes (hypotheses six through ten) were accepted. However, analysis of the data revealed several significant differences between the groups relative to several of the variables pertaining to specific attitude concepts.

#### Poor

Tables 3 and 4 present the analysis of the data from the semantic differential attitude inventory evaluating students' attitude toward the poor. Significant differences were reflected in the bi-polar variables healthy/sick. The  $F$ -ratio for Tests was significant at the 0.05 level (Table 3), indicating that the composite pretest and posttest means reflected a shift away from the concept "sick" toward the concept "healthy".

Tables 5 and 6 present analyses of the data from the semantic differential attitude inventory evaluating students' attitude toward the poor. Significant differences were reflected in the bi-polar variable strong/weak. The

Table 3  
 Analysis of Variance, Semantic Differential  
 Concept: Poor  
 Variable: Healthy/Sick

Source	SS	df	MS	F*	P
Treatment (Groups)	2.16128	2	1.0806	.6046	N.S.
Error Between	62.5520	35	1.7872	---	---
Replications (Tests)	3.4409	1	3.4409	7.1970	.05
Treatment X Replications (Groups X Tests)	2.1849	2	1.0925	2.2852	N.S.
Error Within	16.7333	35	.4781	---	---

\*F-ratio based upon 1 and 35 df must be 4.12 to be significant at the 0.05 level.

Table 4  
 Summary of Pretest, Posttest, and Cell Sizes,  
 Semantic Differential  
 Concept: Poor  
 Variable: Healthy/Sick

Group	Pretest	Posttest	Mean Differences	N
Experiential	5.267 <sub>a</sub>	4.400 <sub>b</sub>	.867	15
Classroom	4.773 <sub>ab</sub>	4.773 <sub>ab</sub>	---	8
Control	4.667 <sub>ab</sub>	4.200 <sub>b</sub>	.467	15

Note: Means having common subscripts are not significantly different from each other at the 0.05 level using the Newman Keuls Test.

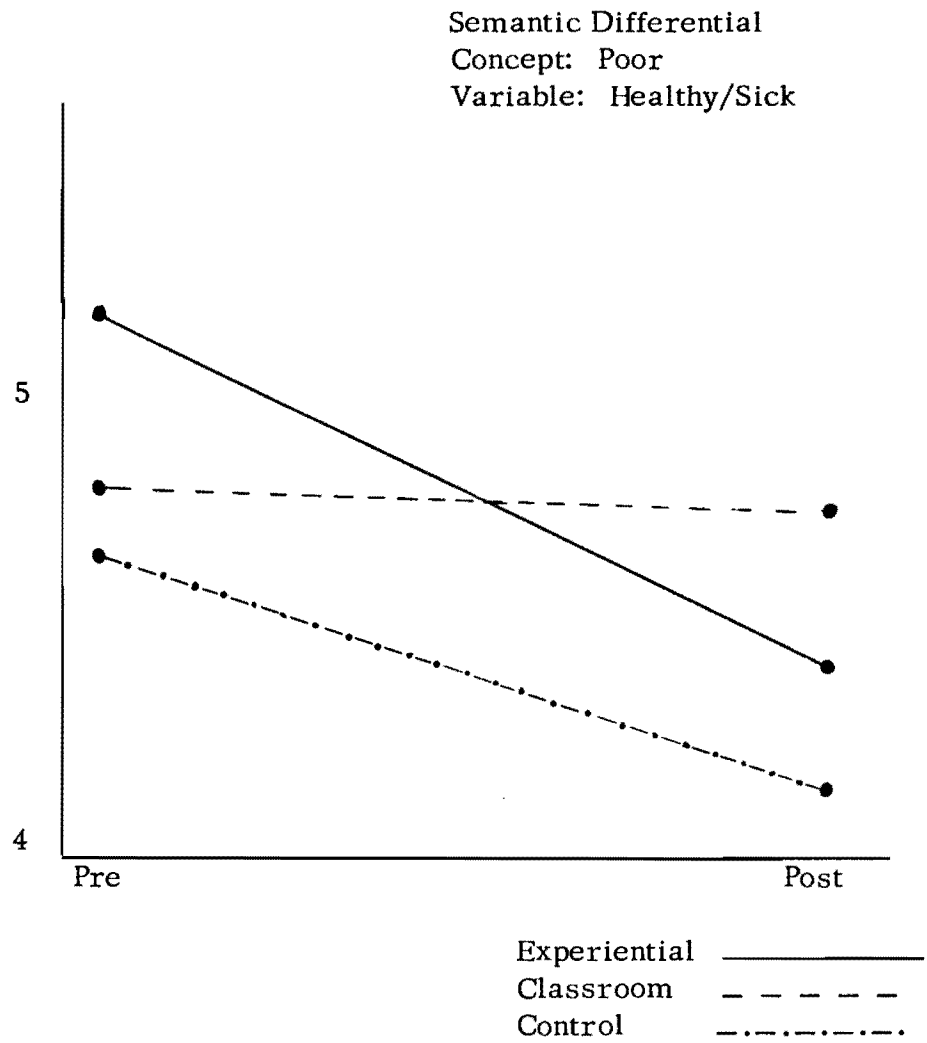


Figure 2. Pretest, Posttest Attitudes Toward Poor (Healthy/Sick)

Table 5  
 Analysis of Variance, Semantic Differential  
 Concept: Poor  
 Variable: Strong/Weak

Source	SS	df	MS	F*	P
Treatment (Groups)	2.717	2	1.358	.7749	N.S.
Error Between	61.372	35	1.753	---	---
Replications (Tests)	3.757	1	3.757	5.8154	.05
Treatment X Replications (Groups X Tests)	2.513	2	1.256	1.9454	N.S.
Error Within	22.614	35	.646	---	---

\*F-ratio based upon 1 and 35 df must be 4.12 or larger to be significant at the 0.05 level.

Table 6  
 Summary of Pretest, Posttest and Cell Sizes for  
 Semantic Differential  
 Concept: Poor  
 Variable: Strong/Weak

Group	Pretest	Posttest	Mean Differences	N
Experiential	4.533 <sub>ab</sub>	3.733 <sub>b</sub>	.800	15
Classroom	4.773 <sub>a</sub>	4.113 <sub>ab</sub>	.660	8
Control	3.933 <sub>ab</sub>	4.000 <sub>ab</sub>	.067	15

Note: Means having common subscripts are not significantly different from each other at the 0.05 level using the Newman Keuls Test.

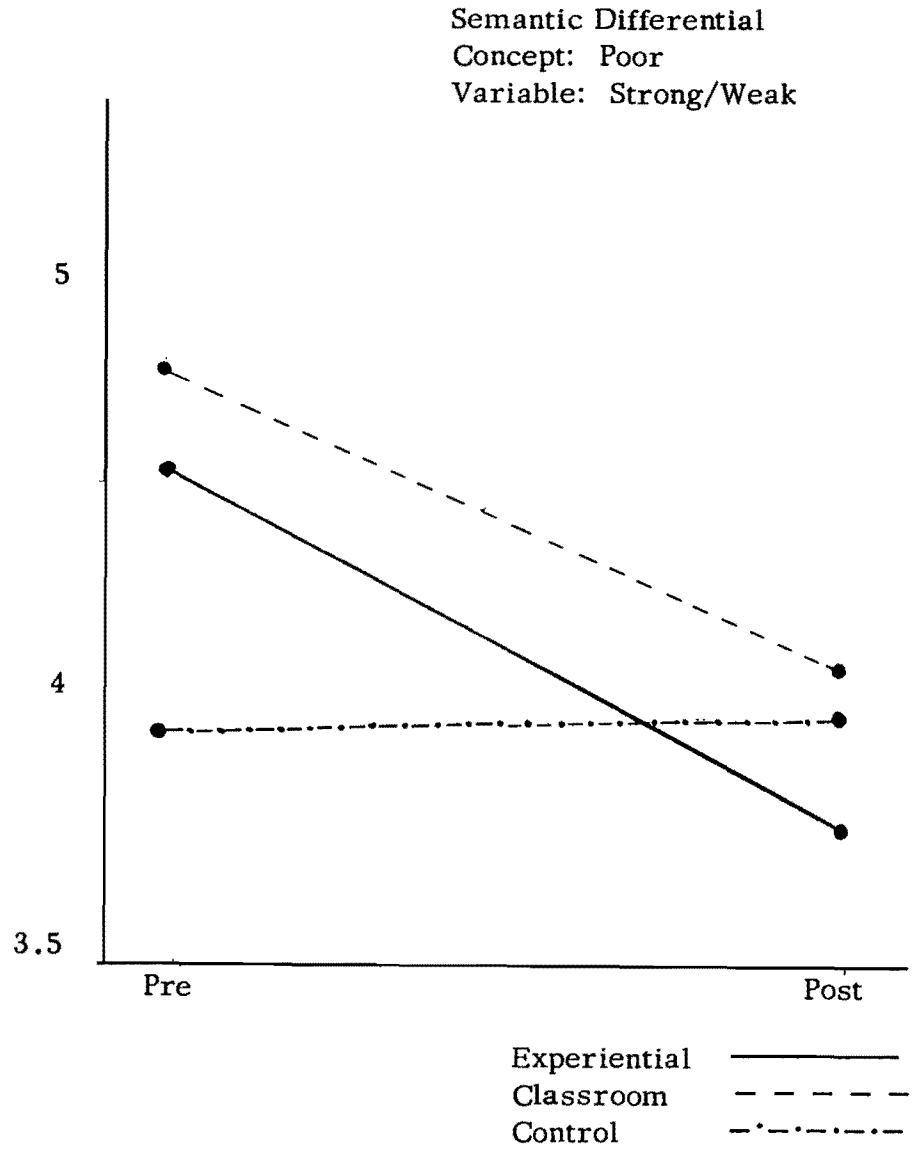


Figure 3. Pretest, Posttest Attitudes Toward Poor (Strong/Weak)

F-ratio for Tests was significant at the 0.05 level (Table 5), indicating that the composite pretest and posttest means reflected a shift away from the concept of weakness toward the concept of strength.

Although the Groups X Tests interaction was not significant ( $p < 0.25$ ), the Newman Kuels test was run on interaction means to determine if any indications of differences existed. The results of the analysis indicated that both the experiential and classroom groups perceived the poor to be stronger following their respective experiences (Figure 3). Because the use of the Newman-Keuls test is not recommended unless the F score is significant, results of this analysis should be used only in a descriptive manner.

### Legislators

Tables 7 and 8 present the analysis of the data evaluating students' attitudes toward legislators. Significant differences were reflected in the bi-polar variable hard/soft. The F-ratio for Tests was significant at the 0.01 level, indicating that the composite pretest and posttest means reflected a shift away from the negative (hard) toward the positive (soft) (Figure 4).

The F-ratio for Groups X Tests was significant at the 0.05 level indicating that there were significant differences between the improvement of the experiential, classroom, and control groups on the attitude inventory. The Newman Keuls test revealed that the experiential group changed significantly in attitude toward legislators from pre to post test.

Table 7

Analysis of Variance, Semantic Differential  
Concept: Legislators  
Variable: Hard/Soft

Source	SS	df	MS	F*	P
Treatment (Groups)	.3769	2	.18845	.15260	N.S.
Error Between	43.2213	35	1.23489	---	---
Replications (Tests)	2.5154	1	2.5154	8.2364	.01
Treatment X Replications (Groups X Tests)	3.0023	2	1.5012	4.9155	.05
Error Within	10.6880	35	.3054	---	---

\*F-ratio based upon 1 and 35 df must be 7.41 or larger to be significant at the 0.01 level. F-ratio based upon 2 and 35 df must be 3.27 or larger to be significant at the 0.05 level.

Table 8

Summary of Pretest, Posttest, and Cell Sizes  
for Semantic Differential  
Concept: Legislators  
Variable: Hard/Soft

Group	Pretest	Posttest	Mean Differences	N
Experiential	3.067 <sub>b</sub>	4.400 <sub>a</sub>	.933	15
Classroom	3.227 <sub>b</sub>	3.500 <sub>ab</sub>	.273	8
Control	3.533 <sub>ab</sub>	3.467 <sub>ab</sub>	.066	15

Note: Means having common subscripts are not significantly different from each other at the 0.05 level using the Newman Keuls Test.

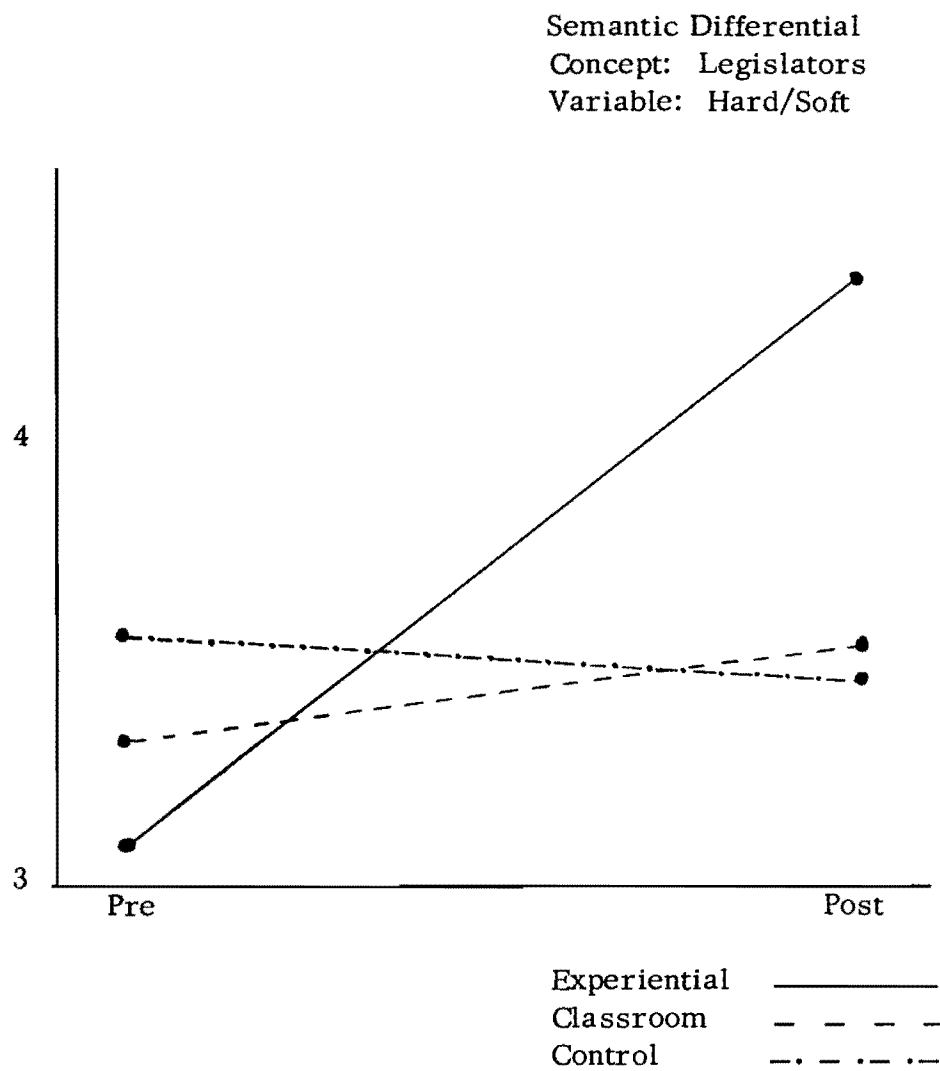


Figure 4. Pretest, Posttest Attitudes Toward Legislators (Hard/Soft)



### Medical Doctors

Tables 9 and 10 present the analysis of the data evaluating students' attitudes toward medical doctors. Significant differences were reflected in the bi-polar variable kind/cruel. The  $F$ -ratio for Tests (Table 9) was significant at the 0.05 level, indicating that the composite pretest and posttest means reflected a shift away from the positive kind toward the more negative cruel. Figure 5 reveals the stable pre and post scores within the classroom and control groups and significant differences in the experiential group.

Tables 11 and 12 present the analysis of the data evaluating students' attitudes toward medical doctors concerning the bi-polar variable sensitive/insensitive. The  $F$ -ratio for the main effect of Groups (Table 9) was significant at the 0.05 level. The Newman Keuls analysis indicated that the combined pretest and posttest scores of the classroom group were significantly different from those of the experiential and control groups (Table 12).

The  $F$ -ratio for the main effect of Tests was significant at the 0.01 level, indicating that the composite pretest and posttest means reflected a shift in the negative direction, toward insensitivity. The  $F$ -ratio rates for Groups X Tests was also significant at the 0.05 level. The Newman Kuels test indicated that the classroom group perceived medical doctors as significantly ( $p < 0.05$ ) more insensitive following educational intervention. Also, the classroom group was significantly different ( $p < 0.05$ ) on the post attitude measure than the experiential and control group (Figure 6).

Table 9

Analysis of Variance, Semantic Differential  
 Concept: Medical Doctors  
 Variable: Kind/Cruel

Source	SS	df	MS	F*	P
Treatment (Groups)	6.7285	2	3.3643	2.0382	N.S.
Error Between	57.7720	35	1.650629	---	---
Replications (Tests)	4.328	1	4.328	7.0226	.05
Treatment X Replications (Groups X Tests)	3.4356	2	1.7178	2.7873	N.S.
Error Within	21.5720	35	.6163	---	---

\* $\bar{F}$ -ratio based upon 1 and 35 df must be 4.12 or larger to be significant at the 0.05 level.

Table 10

Summary of Pretest, Posttest and Cell Sizes  
 for Semantic Differential  
 Concept: Medical Doctors  
 Variable: Kind/Cruel

Group	Pretest	Posttest	Mean Differences	N
Experiential	2.333 <sub>b</sub>	2.400 <sub>b</sub>	.067	15
Classroom	2.500 <sub>b</sub>	3.613 <sub>a</sub>	1.113	8
Control	2.267 <sub>b</sub>	2.600 <sub>b</sub>	.333	15

Note: Means having common subscripts are not significantly different from each other at the 0.05 level using the Newman Keuls Test.



Table 11

Analysis of Variance, Semantic Differential  
 Concept: Medical Doctors  
 Variable: Sensitive/Insensitive

Source	SS	df	MS	F*	P
Treatment (Groups)	10.1720	2	5.086	3.3207	.05
Error Between	53.6053	35	1.5316	---	---
Replications (Tests)	9.4817	1	9.4817	13.2371	.01
Treatment X Replications (Groups X Tests)	6.6898	2	3.449	4.6697	.05
Error Within	25.0720	35	.7163	---	---

\*F-ratio based upon 2 and 35 df must be 3.27 or larger to be significant at the 0.05 level. F-ratio based upon 1 and 35 df must be 7.41 or larger to be significant at the 0.01 level.

Table 12

Summary of Pretest, Posttest, and Cell Sizes  
 for Semantic Differential  
 Concept: Medical Doctors  
 Variable: Sensitive/Insensitive

Group	Pretest	Posttest	Mean Differences	N
Experiential	2.267 <sub>b</sub>	2.533 <sub>b</sub>	.266	15
Classroom	2.387 <sub>b</sub>	4.000 <sub>a</sub>	1.613	8
Control	2.200 <sub>b</sub>	2.533 <sub>b</sub>	.333	15

Note: Means having common subscripts are not significantly different from each other at the 0.05 level using the Newman Keuls Test.

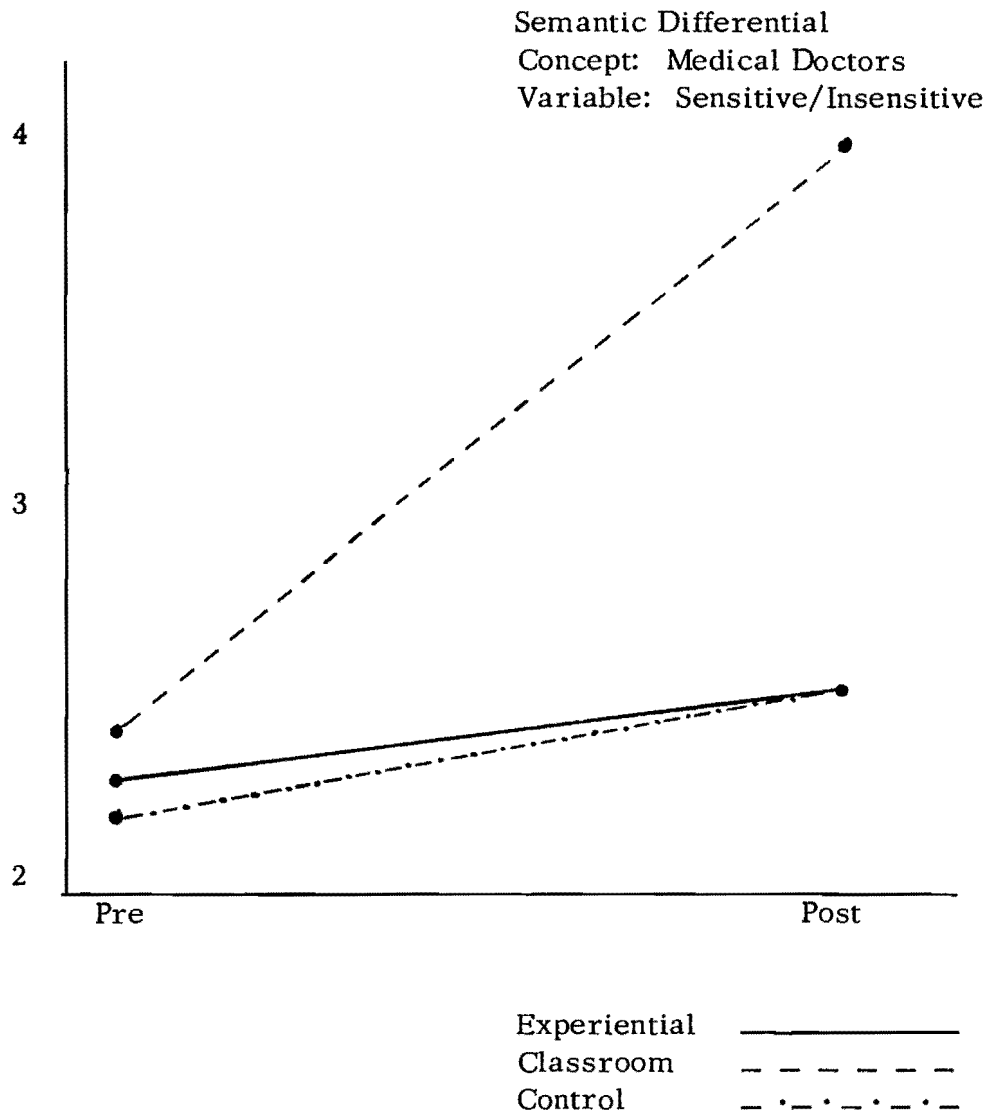


Figure 6. Pretest, Posttest Attitude Toward Medical Doctors

Tables 13 and 14 present the analysis of the data evaluating students' attitudes toward medical doctors relative to the bi-polar variable positive/negative. The  $F$ -ratio for the main effect of Tests (Table 13) was significant at the 0.01 level, indicating that the composite pretest and posttest means reflected a shift toward perceiving medical doctors as more "negative". The  $F$ -ratio for Groups X Tests was significant at the 0.05 level.

The Newman Keuls Test revealed that the classroom group perceived medical doctors to be significantly ( $p < 0.05$ ) more negative following their educational program. Also, the classroom group was significantly ( $p < 0.05$ ) different on the posttest assessment than the experiential and control group (Table 14; Figure 7).

### Behavior

The final hypothesis pertained to a comparison of behaviors between the experiential, classroom, and control groups following their respective acceptance. For convenience, that hypothesis is stated below:

Hypothesis 11	There would be no significant differences in selected post learning behaviors between the experiential, classroom, and control groups.
---------------	----------------------------------------------------------------------------------------------------------------------------------------

### Unobtrusive Measure

Based on the model utilized by Milton Rokeach (1970) an unobtrusive behavior measure was utilized in an attempt to assess selected behavioral

Table 13

Analysis of Variance, Semantic Differential  
 Concept: Medical Doctors  
 Variable: Positive/Negative

Source	SS	df	MS	F*	P
Treatment (Groups)	6.7770	2	3.3885	1.7084	N.S.
Error Between	69.4213	35	1.9834	---	---
Replications (Tests)	11.9014	1	11.9014	18.3649	.01
Treatment X Replications (Groups X Tests)	4.3345	2	2.1673	3.3436	.05
Error Within	22.6853	35	.6482	---	---

\* $\bar{F}$ -ratio based upon 1 and 35 df must be 7.41 or larger to be significant at the 0.01 level.  $\bar{F}$ -ratio based upon 2 and 35 df must be 3.27 or larger to be significant at the 0.05 level.

Table 14

Summary of Pretest, Posttest and Cell Sizes  
 for Semantic Differential  
 Concept: Medical Doctors  
 Variable: Positive/Negative

Group	Pretest	Posttest	Mean Differences	N
Experiential	1.933 <sub>b</sub>	2.333 <sub>b</sub>	.400	15
Classroom	2.113 <sub>b</sub>	3.660 <sub>a</sub>	1.547	8
Control	2.133 <sub>b</sub>	2.667 <sub>b</sub>	.534	15

Note: Means having common subscripts are not significantly different from each other at the 0.05 level using the Newman Keuls Test.

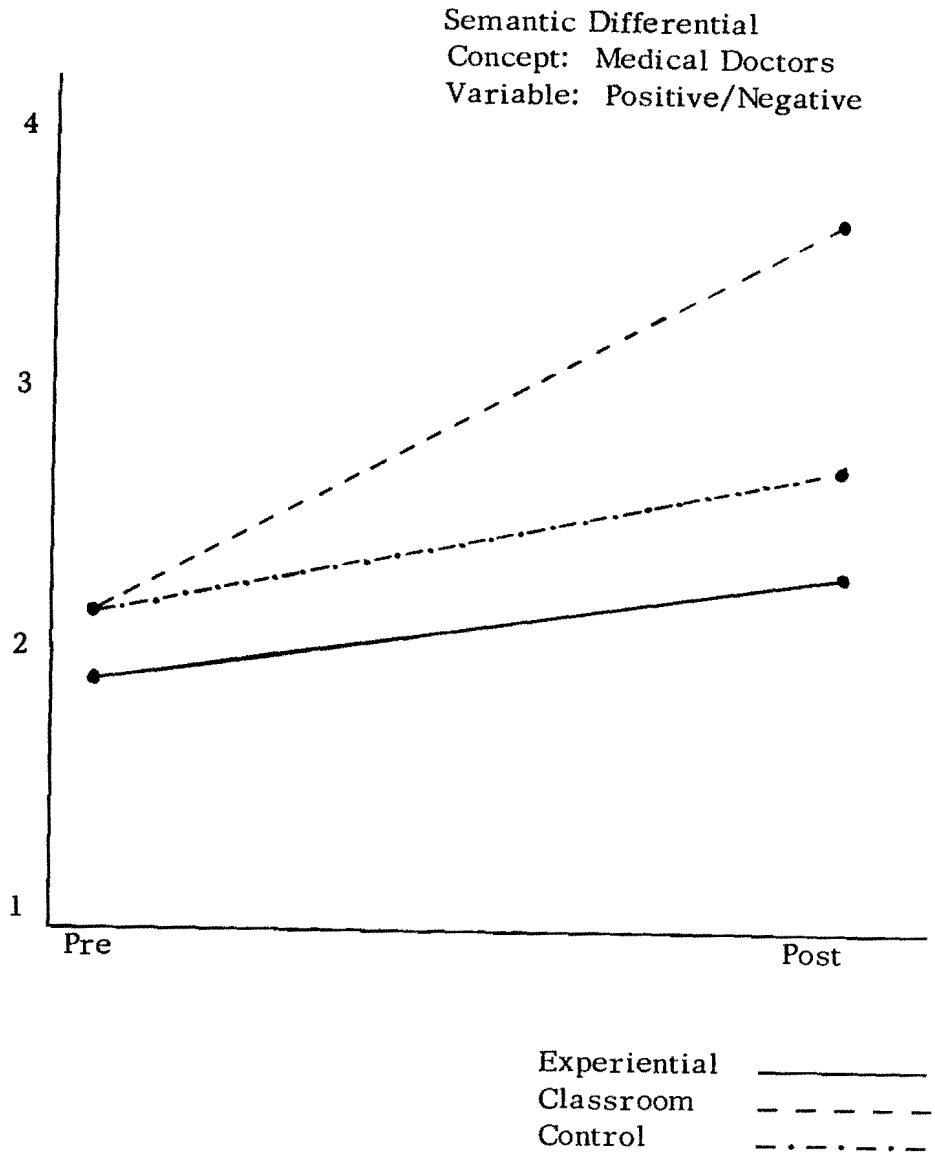


Figure 7. Pretest, Posttest Attitudes Toward Medical Doctors



shifts, if any, within and between the group studied. Table 15 depicts the positive response to the unobtrusive measure. The results were inconsequential and therefore no statistical measure could be applied to the data. Although the sensitivity of the Rokeach measure is subject to question, the principal reason for inconsequential results is most likely the unanticipated small size of the sample tested.

Table 15

## Summary of Unobtrusive Behavior Measure

Response	Live-in	Simulated	Control
Yes I can donate food items	0	0	1
Yes I will be willing to learn more about a food collection center	1*	0	0
No I can not help at this time but am willing to help at a later date	0	0	1

\*Strongest response reported for each return

Self-Reported Behavior

The results of self-reported behavior comparisons between the experiential and classroom groups are summarized in Tables 16, 17, 18, and 19. After categorizing the data in a 2 x 2 contingency table, the Fisher's Exact Probability Test (Siegel, 1956), was utilized. For all categories assessed, which included: Donations (money, clothing, food and others) (Table 16), Personal Involvement (committees and organizations,

volunteer work, and others) (Table 17), and Influence to Seek More Information (course work and media) (Table 18), both the experiential and classroom groups reported positive commitment.

Table 16

Summary of Self-Reported Behavior  
-- Donations

Donations	Experiential		Classroom	
	Yes	No	Yes	No
Money	8	6	3	5
Clothing	6	8	6	2
Food	3	11	1	7
Other	3	11	1	7

Table 17

Summary of Self-Reported Behavior  
-- Personal Involvement

Personal Involvement	Experiential		Classroom	
	Yes	No	Yes	No
Committees or Organizations	5	9	3	5
Volunteer Service	7	7	2	6
Other	2	12	1	7

Table 18

Summary of Self-Reported Behavior  
 --Seek More Information Concerning  
 Health and/or Poor

Seek More Information	Experiential		Classroom	
	Yes	No	Yes	No
Course Work	9	5	6	2
Media	9	5	6	2

In comparing the two groups there were no significant differences in self-reported behavior changes. Both groups reported positive behavioral changes following the workshop and expressed positive plans for future involvement (Table 19).

Table 19

Summary of Self-Reported Behavior  
 Overall Involvement  
 --Present/Future

Overall Involvement	Experiential		Classroom	
	Yes	No	Yes	No
Noticed Behavior Change	10	4	6	2
Overall Involvement Increase Health/Poor	11	3	6	2
Future Plans	12	2	6	2

## CHAPTER V

### SUMMARY, FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND DISCUSSION

#### Summary

##### General Problem

The general problem was to assess differences, if any, in selected areas of knowledge, attitudes, and behavior among students exposed to a classroom model with students exposed to an experiential model in learning about health problems of the poor.

##### Specific Problems

1. To select and/or modify existing instruments which were valid and reliable in measuring selected areas of knowledge, attitudes, and behavior concerning health problems of the poor.
2. To develop and organize methods and materials for teaching the classroom and experiential groups.
3. To measure the change of students' knowledge, attitudes, and behavior related to the poor and their health problems.

##### Population Studied

Twenty-three students enrolled in Health Science 675W (Health Dilemmas of the Urban Poor Workshop) at the University of Utah during the Summer

Quarter, 1973. Fifteen students enrolled in an experiential group and spent the majority of their time immersed in the community. Eight students enrolled in the classroom section and they spent their time only in the classroom. Thirty days after the conclusion of the workshop a control group (N=15) was selected from students enrolled in the summer quarter.

### Research Design

The research design was classified as quasi-experimental. Internal validity was critical and depended upon the validity and reliability of the instruments and consistency in their administration. External validity was not critical since conclusions were confined to the specific population studied. The level of significance for acceptance or rejection of the null hypotheses was set at the 0.05 level of significance.

### Procedures

The procedures discussed included two phases -- preliminary and operational. The preliminary procedures included a computerized search for related literature, the development of materials and experiences for the experiential and classroom models, and the selection and development of the appropriate instruments. The operational procedures included the implementation of the programs and the pre/post knowledge, attitude, and behavioral assessments.

### Findings

Findings, based upon an analysis of data, are presented as they pertained to the 11 research hypotheses.

### Hypothesis 1

The pretest group mean score on knowledge for the experiential group was significantly higher ( $p < 0.01$ ) than the pretest knowledge mean of the control group. There were no significant pretest differences between the experiential and classroom groups nor between the classroom and control groups.

### Hypothesis 2

There was a significant gain in knowledge ( $p < 0.01$ ) by the experiential group from pretest to posttest.

### Hypothesis 3

There was a significant gain in knowledge ( $p < 0.01$ ) by the classroom group from pretest to posttest.

### Hypothesis 4

There was no significant gain in knowledge by the control group from pretest to posttest.

### Hypothesis 5

Posttest mean knowledge scores by the experiential and classroom groups were significantly higher ( $p < 0.01$ ) than the posttest mean for the control group.

#### Hypothesis 6

Although some significant differences were noted for some of the attitude variables, there was no significant overall difference in pretest mean scores on attitude among the experiential, classroom, and control groups.

#### Hypothesis 7

There was no significant change in attitude by the experiential group from pretest to posttest.

#### Hypothesis 8

There was no significant change in attitude by the classroom group from pretest to posttest.

#### Hypothesis 9

There was no significant change in attitude by the control group from pretest to posttest.

#### Hypothesis 10

There was no significant difference in attitude among the experiential, classroom, and control groups on the posttest examination.

#### Hypothesis 11

There was no significant difference in selected post learning behaviors among the experiential, classroom, and control groups.

### Conclusions

Based upon the results of the research, the following conclusions were drawn:

1. In terms of increasing levels of knowledge about health problems of the poor, the experiential model and classroom model appear to be equally effective. Both approaches resulted in significant knowledge gains while no improvement was demonstrated by the control group. It may be assumed that the health dilemmas faced by the urban poor are not at all common knowledge and that awareness of these problems can be gained through organized learning programs. It is necessary to note that the knowledge results were based only on short-term retention. Consequently, the results may have been altered if long-term retention had been considered.
2. There was ample evidence to suggest that attitudes toward selected objects can indeed be influenced by experiential and classroom learning models.
  - A. The experiential and classroom groups showed significant shifts in their attitude toward the "potency" of the urban poor. Prior to the learning experiences, both groups generally perceived the poor as weak, that is, having minimum potential or potency to affect their lives. After their learning experiences, both groups demonstrated significant shifts away from



seeing the poor as "weak" toward perceiving them as "strong," perhaps reflecting a greater resiliency to respond to and improve their situation. Often, the poor are seen as an acquiescent, helpless group lacking the potency for self determination. The learning experiences utilized in this study caused students to modify that attitudinal perception.

- B. Students involved in the experiential group demonstrated a significant shift in their perception of the health status of the poor. Before immersion both the classroom and experiential group perceived the poor to be "unhealthy" or "sick." Following immersion, the experiential group shifted their attitude significantly toward perceiving the poor as healthier. The classroom and control group did not shift their attitudes and continued to perceive the poor as "sick" or "unhealthy." This result appears to support the value of firsthand experience and interaction as a medium for creating a more realistic evaluation of a group or person's health status.
- C. In the experiential group, students and state legislators worked closely and had to cooperate with one another during the immersion experience. Following that interaction, students in the live-in section reflected an attitude shift to perceiving the legislators as softer individuals. Similar shifts were not found in the classroom and control groups. Again, the results provide

additional support for bringing together supposedly polarized groups for educational endeavors as a means of developing mutual understanding.

- D. Unlike members of the experiential and control groups, students in the classroom group demonstrated significant negative shifts in their attitude toward physicians. After their classroom experience, participants saw medical doctors as less sensitive, more cruel and less positive. The negative shift was surprising in that the group was only exposed to two physicians. In their presentations, both outlined the services their respective agencies provided for the indigent. However, one of the doctors, prior to his formal presentation, was openly critical of one of the workshop staff members for failing to use appropriate protocol in contacting members of his agency. His remarks were loud and clearly embarrassing to everyone concerned. The incident took place in full view of the classroom participants. Subsequent to the classroom session, several students reported their dismay over the doctor's behavior.

Although there were no statistical data to demonstrate a causal relationship, the overwhelming circumstantial evidence suggests that a single, powerful incident may be responsible for attitudinal shifts in a given population of students. Accordingly, teachers should be aware of the possible outcomes of

"one-shot" presentations. Perhaps experiential exposure enables students to see the physician in his/her natural service settings, allowing the students to gain a broader, more realistic perspective of the doctor's strengths and weaknesses.

3. Six months after the conclusion of the workshop experience, participants in both the experiential and classroom groups reported increased commitment to the poor and their health problems. Therefore, it may be assumed that both the experiential and classroom health education modalities have potential for measurable behavior change. Although this was an attempt to examine the effects of education on behavior change, time did not permit an evaluation of possible shifts over a longer time span.

#### Recommendations

Based upon the findings of this study, the following research is recommended:

1. A similar study utilizing larger and more controlled samples should be conducted in an attempt to verify or repudiate the results of this study.
2. Studies should be conducted to ascertain the propriety of instruments used to measure attitude and behavior shifts as a function of selected learning experiences.

3. Future studies of a similar design should utilize those bi-polar variables included in the semantic differential which were deemed sensitive measures for assessing attitudes related to the indigent.
4. Comparative studies involving experiential learning in health education employing creative unobtrusive evaluation techniques need to be conducted.
5. Further behavior measures should be developed in all areas of health in an effort to more accurately assess the value of health education.
6. In future studies, follow-up behavior and attitude measures should be attempted over an extended period following the experience.
7. Studies should be conducted which analyze the cost and time benefits of short-term experiential health education learning models as compared with traditional quarter or semester offerings.
8. Further studies in health education should attempt to substantiate or repudiate the value of role-playing and simulation experiences in reflecting attitude and behavior changes.
9. Because of the "live-in" component of the experiential model, assessments should be made to determine the personal growth of the participants regarding such factors as group cohesion, self-concept, empathy and communication skills.

## Discussion

Because a given college believes its prospective health professionals should be cognizant of the special health problems facing the inner city poor, it establishes a course entitled "Health Dilemmas of the Urban Poor." The instructor asks the question, how can the experiences be organized to maximize student learning? If the students were immersed in an inner city area to live and fend for themselves as they studied health problems, would the results of their learnings differ from that of students who had participated in a dynamic classroom experience covering the same content and utilizing a myriad of teaching approaches?

Important to this discussion is the fact that every attempt was made to design high quality experiential and classroom offerings around identical themes. The instructors for both sections were experienced and proficient teachers. The classroom group was exposed to a variety of teaching modalities which included small groups, lectures, guest speakers, films, and problem solving activities.

Despite strong theoretical and philosophical support for the experiential model, the literature was not at all consistent with significant findings in support of one modality over another. However, the results of several studies were verified by the present study.

Diamond's (1971) study attempted to change attitudes of college students toward police through varied forms of interaction. The results indicated that

following interaction with police, students were less likely to perceive them as rigid, calous, or insensitive. These findings were substantiated in the present study which demonstrated that attitudes toward polarized groups such as legislators, poor, and medical doctors can be changed through interaction.

Bennett (1965), Wise (1970), and Harmon (1973) compared the efficacy of direct experience to classroom learning. They found no significant differences in the two approaches. The findings of the present study verified the conclusions by Bennett, Wise and Harmon.

Despite the lack of statistical evidence in favor of the experiential approach in the present study, there was an abundance of anecdotal data available to substantiate "learning by doing." Each participant in the experiential group maintained a personal diary. Although diary reports were deemed inadequate as evidence for justifying a specific methodology of teaching, they were perhaps indicative of learning currently not amenable to measurement. The following examples were representative of numerous comments reported by students in their personal diaries.

The feeling of being turned down from welfare:

I told her (social worker) I just arrived in Utah. She went on to inform me that since I was not a permanent resident that I would not get the stamps. After she told me that, the looks of sympathy I received from the girls waiting behind me in line was my first tingle of poverty.

A student applying for food stamps:

In looking around the waiting room I noticed the faces of the people. They reflected a shame, their eyes did not focus on specific objects or persons but just wandered in a glare.

In passing through Central City:

We walked and asked people along the way about health facilities, where could we go if we were sick and what did the city health department offer? Very few knew anything that could help us, some heard about the health department but only one knew what they offered.

Discussing the total reaction of the workshop:

I will be working in the community and this has helped me to understand people in a different context. It has given me a new enthusiasm and I will be willing and anxious to devote my time to helping a cause such as some of the ones we have participated in.

The opportunity of being involved in the workshop brought to me an absolute understanding of the social, economic, and humanitarian values that surrounded the various organizations and services.

(Additional anecdotal accounts are available in Appendix P.)

In conclusion, the results give rise to several relevant questions.

First, were the instruments sensitive enough to measure what they purported to measure? Secondly, there were seemingly limitless variables involved in the study; were the control measures adequate? Perhaps a more fundamental question would be: Is it realistic to think that we can control all of the variables in social research? Finally, to what extent was the overt enthusiasm exhibited by teachers and students for the experiential model an indicator of a successful learning approach? It seems apparent that those questions need to be probed in order to clarify the results.

First, there appears to be some question as to the sensitivity of the instruments used in the present study. In defense of the scales used, one

must realize the difficulty of measuring attitudes and behavior. Nevertheless, the results of the semantic differential did shed light on variables which were more likely to depict attitude shifts. The unobtrusive behavior measure utilized by Rokeach, as well as in the present study, appeared to have the potential for measuring change; unfortunately, however, the sample size was inadequate to provide any statistical significance. Hopefully, future research will probe these concepts further and explore other indices that appear to be sensitive enough to depict change.

Secondly, the number of variables in any behavioralistic study will always be a detriment to the findings. Every attempt must be explored to look at the need for conducting such studies in more tightly controlled settings.

Despite the lack of statistically significant results, the overwhelming enthusiasm exhibited by students in the experiential group raises unanswered questions. The emotional arousal induced by experiential classes may be an important factor for increasing learning effectiveness. At this point in time, however, enthusiasm is not amenable to scientific measurement. Nevertheless on-going research efforts must be continued in an effort to devise appropriate measuring tools that will provide accurate assessment of the affective domain in learning.



APPENDIX A

RESEARCH PROPOSAL FORM

REVIEW COMMITTEE FOR RESEARCH WITH HUMAN SUBJECTS

new project

continuing project

1. Title and Nature of Study:

A Comparison of Experiential and Traditional Learning Models in Studying Health Problems of the Poor

2. Procedures Affecting Subjects:

Subjects will be objectively tested on knowledge, attitudes, and behavior concerning the health of the poor.

3. Protection of Rights and Welfare of Subjects:

The anonymity of the participants will be assured.

4. Risks and Potential Benefits:

There will be no potential risks to the subjects concerning the testing procedures.

5. Gerald F. Braza  
Responsible Investigator

IRMP GRANT-URBAN POOR  
Grant No. if any

College of Health-Health Education  
Department

Gerald F. Braza  
Signature of Responsible Investigator

This project has been approved by the REVIEW COMMITTEE FOR RESEARCH WITH HUMAN SUBJECTS.

Date 5-25-73

Chairman E. G. Best

APPENDIX B

IDENTIFICATION CARD

**Identification Card**

This is to verify that the holder

Name _____			
Height _____	Weight _____	Sex _____	Social Security Number _____
Date of Birth _____	Color of Eyes _____	Color of Hair _____	

is a registered participant in the workshop,  
"Health Dilemmas of the Urban Poor" --  
an official program jointly conducted by  
the University of Utah and the Intermountain  
Regional Medical Program--June 4-13, 1973



Participant's Signature \_\_\_\_\_

**Emergency Phone 581-8125  
24 Hours**

This workshop is an official program of the  
University of Utah and is being conducted  
in cooperation with the following community  
agencies:

- The Salt Lake City Police Department
- The Salt Lake County Sheriffs Department
- The Salt Lake City and County Health Department
- The Ogden City Police Department
- The Ogden City Chamber of Commerce

## APPENDIX C

### PARTICIPATING AGENCIES

Alcohol Recovery Center (SLC)	Ogden Rescue Mission
Alcohol Recovery Center (Ogden)	SLC Rescue Mission
Catholic Charities	Salt Lake Mental Health
Children's Service Society	Salvation Army (Ogden)
City-County Health Department	Salvation Army (SLC)
(all departments)	State Department of Health
Community Action Program - CAP - (SLC)	St. Benedicts Hospital - ER
Community Action Program - CAP - (Ogden)	St. Benedicts Hospital - ATC
County Jail (SLC)	Travelers Aid
Crossroads Urban Center	University of Utah Hospital:
David O McKay Hospital	ER
Detention Center (SL County)	Out Patient
Employment Security	Volunteer Services
Family Services (State of Utah)	VA Hospital
Food Costs (Comparative)	Alcoholics Ward
Guadalupe Center	Nursing Home Care
Holy Cross Hospital (Outpatient & ER)	Weber County Health Department
House of Hope	
Housing (rental or buy) in low income area	
LDS Hospital	
LDS Social and Medical Services	
Low income neighborhoods	
Low cost <u>Transportation</u>	
Manhattan Project	
Meals on Wheels	
Migrant Council (SLC)	
Migrant Council (Ogden)	
Migrant Health Clinic (Ogden)	
Neighborhood Health Center	
Nutrition Aid Program (Group that prepared our luncheon on first day of workshop)	
Odyssey House	
Planned Parenthood	
Project Reality	
Private physician and health care delivered to the poor	

## APPENDIX D

### KNOWLEDGE EXAM

**DIRECTIONS:** The purpose of this test is to assess how familiar you are with the various agencies which deliver public health services in the state of Utah. This will include services available through various federal programs as well as specific services offered by local agencies. For all multiple choice questions, there is only one correct answer. That is, for multiple choice questions, if it appears that more than one response is correct, check the response which you feel is most correct.

1. The Neighborhood Health Center in Salt Lake City:
  - A. Specializes in emergency health care.
  - B. Gives complete health care except dental health care.
  - C. Provides comprehensive health care.
  - D. Only provides care to welfare patients.
  - E. Does not provide transportation to those who need it.
  
2. Traveler's Aid provides all but one of the following services:
  - A. Free meals at the Traveler's Aid Society Office.
  - B. Emergency assistance and professional counseling to get at underlying problems.
  - C. Counseling to prepare persons for conditions to be faced in a new environment.
  - D. Refers people to sources of help within the community.
  - E. Free referral service.
  
3. Your two year old child is healthy and you would like to get him a free comprehensive physical examination (Well-Baby Care). Where would you go for this service?
  - A. University Hospital
  - B. Neighborhood Health Center
  - C. City-County Health Department
  - D. Holy Cross Hospital
  - E. Division of Family Services
  
4. Which of the following statements about the University Hospital Emergency Service is NOT true:

- A. A minimum charge of \$6.00 to \$9.00 is made for use of emergency room (ER).
  - B. Delays can be expected for those who need X-Ray or diagnostic tests.
  - C. Those with sore throats and general aches and pains will be treated in the ER.
  - D. Follow-up care is not given in the ER.
  - E. Children cannot be treated without parental consent except in extreme emergency.
5. Salt Lake City-County Health Department provides all but one of the following services:
- A. Child Health Conference
  - B. Venereal Disease Clinic
  - C. Physical examinations for the needy
  - D. Immunization clinic
  - E. Family planning clinics
6. Mr. and Mrs. Foster have been told they may be eligible for food stamps, where would they apply?
- A. Social Security Administration
  - B. University Hospital
  - C. Food Services Administration (Post Office Building)
  - D. Community Action Program (CAP) Centers
  - E. Utah State Family Services
7. While passing through Salt Lake City, a young couple's car develops engine trouble. They have less than five dollars in their pocket. They're down and out. Where are they most likely to get direct help?
8. If a friend asked your advice concerning diagnosis and treatment of venereal disease, where would you send him?
- A. University Hospital
  - B. Neighborhood Health Center
  - C. Community Health Center Foundation
  - D. City-County Health Department
  - E. Division of Family Services
9. Free immunization for all members of low income families can be obtained from:

- A. City-County Health Department
  - B. University of Utah Hospital
  - C. Any hospital Out-Patient Clinic
  - D. Family Doctor
  - E. All of the above
10. This organization helps people to accept themselves and to deal with family fights, rebellious children, drug abuse, criminal arrests, and other serious problems which confront them:
- A. Salvation Army
  - B. City-County Health Department
  - C. Guadalupe Center
  - D. Rescue Mission
  - E. Community Mental Health Center
11. The Neighborhood Health Center provides all of the following services except:
- A. Dental Care
  - B. 24-hour Emergency Room Facilities
  - C. Diagnostic Services and Treatment
  - D. Eye and Ear Care
  - E. Free Transportation to and from Clinic
12. In order to receive commodities from the L.D.S. Welfare Program, it is recommended that the recipient:
- A. Be a practicing member of any religious group
  - B. Contribute to the program by work
  - C. Pay cash for all goods
  - D. Donate money to the church in future
  - E. Join the L.D.S. Church
13. The City-County Health Department provides which one of the following services?
- A. Check-ups for babies who aren't sick (well-baby care).
  - B. Free physical exams for those on welfare.
  - C. Dispenses free contraceptives to anyone who asks.
  - D. Twenty-four hour on-call emergency service.
  - E. All of the above are correct.

14. Most of those who receive assistance (welfare payments), in both Utah and the U.S. are:
- A. Children
  - B. Mothers
  - C. Aged
  - D. Men
15. Most families on welfare in Utah and the U.S. are:
- A. Black
  - B. Mexican American
  - C. White
  - D. American Indian and Orientals
16. Deliberate Misinterpretation by welfare recipients (cheating) occurs in what percentage of welfare cases?
- A. More than 25%
  - B. 20-25%
  - C. 10-20%
  - D. Less than 5%
17. Which one of the following organizations survives solely on personal donations--not on financial support from organized charity or government funds?
- A. Rescue Mission
  - B. Salvation Army

SHORT ANSWER: Try to answer these questions to the best of your ability.

18. Who is eligible for Food Stamps?
19. What foods are included on the list of available Surplus Food Commodities?
20. How does one get Surplus Food Commodities?
21. Briefly explain who is eligible to receive help from the Aid to Families with Dependent Children (AFDC) Program.

If you arrived in Salt Lake City at 5:00 p.m. without any money and you were hungry, how would you go about getting food? List as many legal possibilities as you can.

22.

23.

24.

25.

26.





Sometimes you may feel as though you've had the same item before on the test. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in the test. Make each item a separate and independent judgment. Complete this test as fast as possible. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the items, that we want. On the other hand, please do not be careless, because we want your true impressions.











APPENDIX F

UNOBTUSIVE MEASURE

WESTSIDE FAMILY MARKET  
346 West First South  
Salt Lake City, Utah 84101  
Phone (801) 355-1541

Dear

HUNGER is alive and living in Salt Lake City. Inflation during the past year has made hunger one of our city's constant health problems. In Salt Lake, every day a number of families are in need of emergency food. These families in a crisis need your help.

The Westside Family Market has been helping hungry families with food for over three years. The need has been growing slowly until now some 80-90 families seek and get help each month. But, keeping a supply of food on hand is a problem. In order to continue to help others your help is desperately needed.

Almost anything can be used at Westside Family Market, but the most needed items are canned meats of all kinds, tuna fish, soups, canned vegetables and fruits. In addition, the market needs flour, sugar and coffee, as well as breakfast foods, pinto beans, rice and macaroni products.

If you can provide any food items or are willing to organize a collection center in your neighborhood please fill out and return the enclosed post card. If you do plan to donate, a volunteer in your neighborhood will contact you concerning the pick up of your contribution.

Thank you for considering this letter and please try to help the HUNGRY of our city.

Sincerely,

Rev. Gerald Merrill



## SAMPLE POST CARD

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE \_\_\_\_\_

- YES, I CAN DONATE FOOD ITEMS
- YES, I WILL BE WILLING TO LEARN MORE ABOUT ORGANIZING A FOOD COLLECTION CENTER IN MY NEIGHBORHOOD
- NO, I CAN NOT HELP AT THIS TIME BUT MAY BE WILLING TO HELP AT A LATER DATE

National Information Center  
for Service Learning  
1954 Buford Ave, Room R290  
St. Paul, MN 55108-6197

WESTSIDE FAMILY MARKET  
346 West First South  
Salt Lake City, Utah 84101  
Phone (801) 355-1541

Dear

About two weeks ago you received a letter and return post card concerning the hungry in Salt Lake City. In this letter a plea for your help was made regarding the donation of food and/or the setting up of a food collection center in your neighborhood.

The need for food still exists and this letter is being sent as a reminder and encouragement for you to become involved.

If you can help, please return the enclosed postage card. Thank you for considering this second request and please try to help the hungry of our city.

Sincerely,

Rev. J. Merrill

P.S. As you recall, if you plan to donate food, a volunteer in your neighborhood will contact you concerning the pick up of your contribution.

APPENDIX G

SELF REPORT, BEHAVIOR MEASURE

December 18, 1973

Dear

Approximately six months ago you participated in a workshop entitled "Health Dilemmas of the Urban Poor." Since that workshop you were asked to evaluate the workshop as an educational experience. For the most part, the majority of participants provided feedback which will be helpful in future planning. At this time, we solicit your help in determining the impact of the workshop on your subsequent behavior. For example, have you donated time, money, food, or any other type of service to help promote better health conditions or services for the poor?

The value of any educational experience can be best measured in the behavior changes which follow that experience. To get an accurate account concerning your behavior following the workshop your cooperation in filling out the enclosed form would be appreciated.

We realize that your busy schedule may make it difficult for you to find time to complete and return the enclosed form. However, your cooperation in this final phase of the project is extremely important to the overall success of this project.

Thank you,

Jerry Braza  
Visiting Assistant Professor

jm

## BEHAVIOR EVALUATION

## "Health Dilemmas of the Urban Poor"

Please respond to the items in the evaluation as candidly and completely as possible since the comments we receive will be used to evaluate the success of your experience. Where possible please incorporate the effect of the workshop on your behavior and in your response be as specific as possible. The results will be kept anonymous.

Name: \_\_\_\_\_

1. Donations represent one type of behavioral commitment. Since the workshop are you aware of any changes (increases or decreases) in your behavior with respect to the following types of donations to the poor? If yes, please explain.
  - a. Monetary donations -
  - b. Clothing donations -
  - c. Food donations -
  - d. Other types of donations (supplies, etc.)
  
2. Direct personal involvement represents a second form of behavioral commitment. Since the workshop, are you aware of any changes (increases or decreases) in your behavior with respect to your personal involvement with health and/or the poor? If yes, please explain.
  - a. Committee or organizational involvement -
  - b. Volunteer services -
  - c. Other -

3. Did the workshop influence you to seek more information about health and/or the poor? If yes, please explain.
- a. Take more courses related to health and/or the poor?
  - b. Exposure to mass media (television specials, books, magazine articles, etc.)
4. Have you noticed any other behavioral changes related to your activities concerning health and/or the poor not mentioned above?
5. Since the workshop experience has your overall involvement concerning health and/or the poor (please check one)?
- Increased \_\_\_\_\_
- Remained the same \_\_\_\_\_
- Decreased \_\_\_\_\_
6. Do you have any plans for future involvement concerning health problems of the poor?

## APPENDIX H

### COURSE OBJECTIVES AND GRADING PHILOSOPHY

Health Dilemmas of the Urban Poor  
Health Education 675W  
1973

WORKSHOP CO-DIRECTORS: Marshall W. Kreuter, Ph.D. and Jerry Braza,  
M.A.

SPECIAL RESEARCH CONSULTANT: George Keiser, M.S.

STAFF: Larry Dotson  
Rick Guyton  
Jerry Lafferty  
Betsy Mates  
Gloria Schow  
Holly Walker

#### COURSE OBJECTIVES:

1. To familiarize the student with those health problems which appear to be unique to the poor.
2. To familiarize the students with the health agencies which service the poor.
3. To create knowledge, attitude, and behavioral changes among the participants.

#### COURSE GRADING:

Because of the nature of the class it is recommended that the student take the class for credit rather than for a grade. If this is not feasible, the following contract grading procedures apply:

GRADE C or CREDIT - Each student will be required to attend all the sessions and compile a diary of the live-in or classroom experience. For the classroom group an outline of the highlights of the presentations must be presented.

GRADE B - All of the above plus an annotated bibliography (minimum six articles) on one specific health problem of the indigent containing basic bibliographical information plus a short abstract (one page per article maximum).

GRADE A - All of the above plus a book review dealing with some aspect of health and the problems of the poor (directly or indirectly).

## APPENDIX J

### BIBLIOGRAPHY OF REQUIRED READINGS

Block, I. The health of the poor. New York: Public Affairs Committee, Inc., 1969.

Blue Cross and Blue Shield. Sources: A blue cross report on the health problems of the poor, 1968.

Bullough, B., & Bullough, V. L. Poverty, ethnic identity, and health care. New York: Appleton-Century Crofts, 1972.

Jones, W. R. Finding community a guide to community research and action. Palo Alto, California: James E. Freel and Associates, 1971.

Schaefer, A. E. Malnutrition in the U.S.A. Nutrition News, 1969, 32, 13-16.



APPENDIX K

SAMPLE ITINERARY

Itinerary #4

Live in Team

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Day 1 Tues

6:00 a.m.

Meet on Capitol Building Steps

7:30 - 8:30 a.m.

Breakfast in Liberty Park (East side of park near parking area next to bandstand)

8:30 a.m.

Organize your team into two sub-groups and do your best to visit as many of the following as you can before the day is out! (Do it in any order you choose)

1. As a welfare recipient, what problem are you confronted with when you try to make an appointment with an M.D.? A Dentist?
2. What are the criteria which make one eligible for:  
(a) medicaid, (b) food stamps, (c) surplus food commodities?
3. Where can an indigent person get well-baby care?
4. What health services does CAP in central city offer?
5. Go to U of U hospital and divide into two sub-teams
  - A. Group A - observe in out-patient clinic for one hour and then observe in waiting area of emergency room for an hour.
  - B. Group B - observe in waiting area of emergency room for one hour and then observe in out-patient clinic for an hour.
6. Find out about the volunteer services at the U of U hospital. (Ask for Mrs. Barbara Hoganson)
7. Conduct Food Market Survey as per instructions by contact person\*

\*Special Note: Meet your contact person at 12:00 Noon in front of J.B.'s Big Boy, 4th South and State.

5:30 p.m. Men go to ARC for evening meal and lodging.  
Women go to House of Hope for meal and lodging.

Day 2 Wed.

Breakfast at lodging site.

8:00 a.m. Divide into two sub-teams for walking tours  
Group A Walk the central city area between 6th So.  
and 8th South and 2nd East and 7th East.  
Group B Walk the freeway area 9th So. and 21st So.  
on 2nd West, 1st West or West Temple.  
During your tour, complete the following tasks:

1. Price housing for a family of five (buy and rent)
2. What are the sanitary conditions of these neighborhoods?
3. Informal survey of residents: (a) where do you go if you are sick? (b) do you know what services are available? at City/County Health Department?

11:00 a.m. Meet contact person on S.E. corner of 6th So. 3rd East to get some money! You will be bussed to NHC - follow instructions by contact person.

12:30 p.m. Meet contact person at 1212 So. State for trip to Chesterfield.

3:00 p.m. Meet contact person at pre-arranged site for return trip to SLC.

3:30 p.m. Go to South wing of Building 4 in the V.A. Hospital Complex, ask for Mrs. Madelyn Wells, R.N. This will involve an orientation meeting, interaction with staff and patients and the evening meal with patients. When you leave the V.A., go to the Urban Crossroads Center 347 S. 4th East. Get there early to insure yourself a bed.

Day 3 Thurs.

8:00 a.m. Go to Welfare Square, ask if you can work for your breakfast.

10:00 a.m. Go to Pioneer Park. Meet with social worker to discuss health and welfare programs of the LDS Church.

- 11:15 a.m. Women go to Traveler's Aid to make lodging and evening meal arrangements. Men go to Plasma Fractions
- 12:30 p.m. Meet contact person on NW corner of 3rd South and Main to go to V.A. Hospital Alcohol Ward Bldg. 3 Ward D. Be prompt!
- From the time you get out of Ward 3-D until 6 PM go to employment security try to get a job.  
What services does Children's Service Society (576 S. Temple) provide?  
Shop for clothes at a charity thrift store.
- 6:00 p.m. Women go to accommodations arranged by Traveler's Aid. Men go to Salvation Army for dinner and lodging.

Day 4 Friday

- Breakfast at lodging sites (women at Greyhound restaurant)
- 10:00 a.m. Meet contact person on SE Corner of State Street and 1st Avenue for return trip to College of Health.

APPENDIX M  
BRAINSTORMING FORMAT

AGENCY \_\_\_\_\_

COMPLIMENTARY REMARKS:

AGENCY \_\_\_\_\_

PROBLEM OBSERVED:

ON THE REVERSE SIDE - CITE A SPECIFIC RECOMMENDATION

APPENDIX N

FINDINGS FROM AGENCY REVIEW

Dear

From: Staff Members of the University of Utah Workshop,  
"Health Dilemmas of the Urban Poor"

Topic: Evaluation of Workshop Experiences

Perhaps the most enduring benefit gained by participants was increased awareness of the number and variety of helping agencies which exist in the Salt Lake - Ogden region. (For workshop purposes "health" was defined in its broad sense to include the physical, mental, social, emotional, and spiritual dimensions of human health--thus, the wide spectrum of agencies visited.) The number of agencies cooperating with the workshop was gratifying. Participants became aware of still more agencies as they progressed through the live-in experience. (See enclosed lists)

Another important benefit was the reduction of social distance between groups which ordinarily do not have much interchange. By living together in the community, sometimes under conditions of stress, the three groups which made up the workshop population (students, state legislators, and low-income community participants) learned to work together and build on their common needs and strengths.

Still another important benefit to class members was identification of local health needs. Following the live-in portion of the workshop, class members were asked to identify major health problems in the Salt Lake-Ogden region. Of these problems, they dealt at length with only three - due to the limitations of class time and size:

1. The need for a central referral service for all helping agencies.
2. The need for improved primary health care delivery providing service to all Utahns, regardless of socioeconomic status or geographical location.
3. The need for the establishment of youth hostels.

Central Referral Agency - Class participants observed that much of the help offered to poor people in the Salt Lake Valley was disjointed. A centralized referral agency, with a highly publicized telephone number, could save people valuable time in their individual searches for help. Class members visualized two chief functions for such an agency: (1) educating for public awareness and (2) counseling and referral service. Such an agency would coordinate efforts by all helping agencies, including such diverse programs as alcoholism rehabilitation, family planning, primary health care, food supplements, employment security, foster home care, juvenile delinquency, welfare, etc.

Primary Health Care Delivery - Workshop members became convinced that our present health care delivery system in Utah leaves many needy people out--especially people in rural areas or outlying Salt Lake suburbs such as Draper, Chesterfield, Rose Park and especially low-income people. Workshop members visualized a state network of primary health care clinics - small clinics but efficient - throughout Utah, both urban and rural. Clinics could utilize public school buildings where possible (afternoon and evening hours) and mobile units where necessary.

Since the need for primary health care in outlying suburbs and rural areas was felt by all economic classes, these state clinics would be open to all Utahns regardless of income. They would not be restricted to low income families. Payment for services would be made on a sliding scale according to income.

Youth Hostels - Class participants observed a large urban transient population. They were convinced that hostels represented a desirable alternative to jail--where many transients end up. Most existing programs which provide free lodging and meals are working at capacity or near-capacity and serving mostly middle-aged or older males. Class members found only two centers in Salt Lake City attempting to meet the need for youth hostels. One of these programs was designed to accommodate people 18-30 years of age. It was overcrowded and understaffed; consequently tolerating sub-standard sanitary conditions. Its policies regarding sex (no separate sleeping quarters for males and females) and drugs (inadequate supervision) were questionable. Class members felt there was much need for improvement in this kind of service.

In addition to identifying the above problems and trying to work out solutions to them, workshop members were asked to evaluate the various existing programs and agencies they visited. Following the live-in experiences they were asked to identify on "5x8" blue cards any agencies which they felt had problems. They were not permitted to make criticisms unless these were accompanied by positive suggestions for improvement. Anyone desiring to compliment an agency was asked to do so on a white card. (All of the cards

are available from the workshop staff to anyone wishing to read them.) Summaries of evaluations are included in this report.

It must be noted that agencies not included in the summaries were not visited by enough people to render the evaluations valid. And it should be remembered that class members did not necessarily evaluate every agency they visited. In many cases they evaluated only those agencies which stood out in their memories.

#### Agencies Visited

Alcohol Recovery Center (Ogden)  
 Alcohol Recovery Center (Salt Lake)  
 Alcohol Treatment Center (St. Benedict's Hospital, Ogden)  
 Catholic Charities  
 Children's Service Society  
 Community Action Program - CAP (Ogden)  
 Community Action Program - CAP (S.L.C.)  
 Comprehensive Health Planning, State of Utah  
 Crossroads Urban Center  
 David O. McKay Hospital  
 Detention Center (S.L. County)  
 Employment Security  
 Family Services (State of Utah - welfare)  
 Guadalupe Center  
 Holy Cross Hospital (Out patient and ER)  
 House of Hope  
 L.D.S. Hospital  
 L.D.S. Social and Medical Services  
 Manhattan Project  
 Meals on Wheels  
 Migrant Council (Ogden)  
 Migrant Council (S.L.C.)  
 Migrant Health Clinic (Ogden)  
 Neighborhood Health Center  
 Nutrition Aid Program  
 Odyssey House  
 Planned Parenthood  
 Project Reality  
 Rescue Mission (Ogden)  
 Rescue Mission (S.L.C.)  
 St. Benedict's Hospital (Ogden) ER  
 Salvation Army (Ogden)  
 Salvation Army (S.L.C.)

Salt Lake County-City Health Department  
Salt Lake City-County Jail  
Salt Lake Mental Health Centers  
Travelers Aid  
Union of the Poor  
University of Utah Hospital - Outpatient, ER, Volunteer Program  
Veterans Administration Hospital  
    Alcohol Ward  
    Nursing Home Care  
Weber County Health Department  
Youth Hostel

Agencies added to list in the course of the workshop:

Deseret Industries Thrift Stores  
Drug Crisis Center  
Golden Hours Center - Ogden  
Indian Recovery Center  
Kearns Family Life Center  
Kiwanis-Felt Girls Club  
Mexican Civic Center  
Page Program (Ogden)  
St. Vincent de Paul Thrift Store





ALCOHOL RECOVERY CENTER  
S.L.

Positive

Negative

Well organized.  
Good food.  
Individual freedom to come and go.  
Men in program regard it as a life saver.  
Desire of alcoholics to help one another.  
Honesty, simplicity, unity in the center.  
Reasonable rules.  
Very clean.  
Excellent program for someone who  
really wants to stop drinking.  
Deserves to be expanded.

## Alcoholic Treatment Center - St. Benedict's (Ogden)

Positive

Very good program.  
Excellent staff.  
Very clean.  
Patients assume responsibilities.

Negative

This wonderful program should be expanded to include more poor people. Presently serves mostly middle class.

Community Action Program  
S.L.C.

Positive

Really tried to meet needs of the poor.  
Willingness to create special interest programs such as sewing, planned parenthood, etc.  
Offered counseling, medical care, job training.  
Served as liason between government and poor people.  
Operated a snack bar in Magna to train young people in food service and business management skills. Helped young people find this kind of work.  
Helped to overcome the attitude of defeat and helplessness among the poor.

Negative

## Crossroads Urban Center

Positive

The center definitely provides a service for those with little or no means of support.

No one was turned away or denied room to sleep, even if on the floor.

Negative

Unsanitary conditions! Dirty bathroom, especially the toilet.

Evidence of drugs, alcohol, and more or less open sex activity in the center. Very little control.

Limited to people from 18-30 years of age.

Not enough beds.

A very loosely run center.

Suggestions

Men and women's sleeping quarters be separate.

Sponsoring and funding organizations should set up higher standards of sanitation and discipline. If these standards are not met, funding should cease.

Enlarge staff.

Health department inspection.

## Detention Center (S.L. County)

Positive

Clean.  
Positive atmosphere.  
Good food.  
Outdoor facilities good.  
Well organized program.  
Good recreation and education programs.  
Excellent staff, concerned about children.  
    Good rapport with children.  
Excellent volunteer program.  
Shelter concept was laudable. Many  
    of the children appeared to be the  
    products of unhappy parents or  
    families.

Negative

Evening hours between 6-11 p.m.  
    rather unproductive. No  
    counselor participation or  
    instruction. There were  
    athletics but no other options.

Suggestions

More educational and vocational types of instruction should be included in  
    program.

More activities for evening hours.

Detention center is better than no home, but better yet would be a real  
    home (no cells) for these children.

## Family Services

Suggestions

To shorten the period between application for aid and receipt of aid:

- (1) locate personnel from employment securities in the Division of Family Services Bldg.
- (2) use the telephone to check out such things as school enrollment of children.

Someone needed to give overview of services available to people as they come to the door.

Food stamps and food supplements should be made available to a broader income range. Requirements are leaving out a lot of needy people.

Coordinate agencies better so that people do not have to do so much running around the city.

Family services could help people more effectively if they set up small neighborhood offices throughout the state.

Make some provision for people needing immediate help.

More warmth and personal interest could be extended by staff to applicants. Some were rather condescending.

Applicants should be asked if they need help filling out forms, rather than waiting for them to ask for help.

A small work program to help someone in need until a more permanent job situation can be found.

Some kind of emergency assistance is needed for transients. No assistance is available for people passing through Utah. Would the federal government be willing to reimburse programs serving transients?

## Guadalupe Center

PositiveNegative

Great food.

They do a good job for the Mexican people.

They have educational and vocational programs as well as a credit union.

People warm and friendly.

Poor people or transients may work a few hours at St. Vincent de Paul Thrift Store and earn a meal ticket to Guadalupe.



## Holy Cross Hospital

PositiveNegative

Concern for people comes first  
and the money situation after-  
ward.

No red tape or hassles over money.

Care for poor people.

## House of Hope

Positive

Excellent staff, very considerate  
and understanding.

Very clean.

Sharing of work responsibilities

Excellent alcohol education program  
in conjunction with the U of U  
Medical Center.

Wonderful food!

Air of serenity prevailed in house and  
garden which was surely a positive  
change from the confused lives the  
women had been living.

Warm atmosphere.

NegativeSuggestion

More Houses of Hope!

## L. D. S. Social and Medical Services

Positive

Excellent welfare program.  
Beginning to coordinate efforts  
with public agencies to help  
people.

Run very efficiently.

Things are re-cycled until they can't  
be used any more. Very little  
waste.

We were treated very well.

No discrimination over race, creed,  
or color.

Negative

Social workers should visit each  
ward regularly to make certain  
people know of services and feel  
welcome to use them. If a par-  
ticular bishop is not committed  
to the program the word may not  
get out as it should.

Although aid is available to non-  
L.D.S. people only a small per-  
centage of these actually ask for  
help. Is it possible to increase  
outreach efforts and spread aware-  
ness?

Since the church welfare plan  
requires a recipient to work when  
he is able to repay the church,  
would it be possible for him to  
work in the same manner to pay  
for the services of a physician?  
The welfare program will pay for  
hospital but not physician fees.  
This makes it necessary to search  
for a "volunteer" physician which  
in times of serious medical need  
may cause the patient additional  
stress.

## Manhattan Project

Positive

Much emphasis on trust  
House very clean  
Yard well-kept  
Less restrictive than most rehabilitative experiences.

Suggestions

1. Work assignments appeared to follow no particular plan, appeared to be random and disjointed.
2. Better organization of work assignments. The house could collectively decide on what needs to be done. Then leaders could make assignments for following day.
3. The confrontation approach in group therapy often seemed to confuse humans with human behavior. Sometimes the value of the former seemed to attached rather than the latter.
4. More training for group therapy leaders.
5. No leisure time or very little. yet one cause of drug addiction is too much leisure time and not knowing what to do. This seems to indicate a need for helping the residents develop healthy pastimes or hobbies. Recreation education!
6. For a trial period have house share responsibility for common meals. Good opportunity to learn food and budget skills. Good opportunity to practice social skills - manners, sharing, etc.

Meals on Wheels (Friendly Neighborhood  
Center)

Positive

This program is so great it should be expanded to all counties!

Delivery men have warmth and sensitivity to human problems.

The program is open to all people over 55, regardless of income.

Especially helpful to handicapped.

Meals were attractive, nutritious and planned to meet special dietary needs.

Negative

Contact with subscribers was minimal because of the necessity to deliver the meals while they were still hot/cold. Could someone visit each subscriber regularly to see how they are doing with regard to transportation, health care, loneliness, information about available services?

The old people seem to want the companionship as much as or more than the food.

## Migrant Health Clinic (Ogden)

Positive

Really reached the poor people.  
Doing an outstanding job.  
Offered medical care - LPN and  
aide to care for minor health  
problems.  
Deserving of expansion and more  
money.

Negative

People needed to help with clerical  
and administrative work. The LPN  
was trying to do it all plus adminis-  
ter medical care -- too much!

## Neighborhood Health Center

Positive

Pre-paid as opposed to crisis care. This means medical expenses are not higher during a month when a family has a lot of illness.

Group practice offers the advantage of many specialists under one roof.

Transportation provided to and from at no extra cost.

All services available. Great asset to community.

Very clean, well-equipped, courteous staff.

Negative

No emergency care given non-members. Referral service needed to aid people who do not qualify for this program.

More centers of this type!

## Nutrition Aid Program

Good well prepared and tasty.

Deserves to be expanded.

This program is a great asset to  
our community.

Nutritional training cuts down on  
waste of food and food dollars.

This program helps poor people meet  
one of the most basic needs of life--  
good nutrition.

Aides chosen from within neighborhoods  
served, so they are familiar with  
the people and problems.

Once trust is built up, clients may ask  
for other kinds of help and aides  
can make referrals.



## Odyssey House

Positive

Excellent program - Expand!

Atmosphere conducive to building self-confidence, respect for self and others.

They are doing a wonderful job!

Very clean.

Negative

The building is one large fire trap. It is amazing with the number of people smoking that there has not been a major fire. A new building is desperately needed. For the time being no smoking should be allowed in bed. Residents should have fire prevention, education including use of fire extinguishers and how to evacuate quickly in case of emergency.

The main thrust of Odyssey House seems to be self-discipline. There needs to be added to this a learning program. Teachers could be brought in to teach classes in general education and vocational training. The kitchen facilities and plumbing (two bathtubs and 2 toilets were stopped up) are inadequate. More money needed - better yet, a new building. The emphasis on discipline and sharing of work responsibilities is essential to any rehabilitation program. Contrary to the impression one might receive from Odyssey House, this emphasis can exist in a family atmosphere of trust, encouragement, and love. There are times when Odyssey House comes uncomfortably close to a totalitarian state where individuality and human dignity are subjugated to un-questioning obedience. Although in fact, residents do demonstrate care and concern for others there is little attention given to these positive values in declared philosophy. Most of the spoken philosophy of the house has to do with militaristic discipline

## Odyssey House (Continued)

Negative

and vigilance. One could very easily come away with the impression that it is unthinkable to speak of the need for love and trust in human relationships. Fortunately the staff is a loving one.

Rescue Mission  
(S.L.C.)

Rescue Mission is one of the finest programs in the city.

They deal with individuals that no other agency seems to care about.

Good food.

Clean sleeping area.

Caring personnel.

Adhered to strict meal schedule--  
6 a.m. and 8 p.m. Could referrals  
be made to other agencies for  
those people who happen to come  
at 7 a.m.?

## Salt Lake City-County Health Dept.

PositiveNegative

No real health facilities for sick people. Just a referral service.

Staff seemed to assume that people knew about the program and its services. We found this not to be the case.

Staff seemed insensitive to the needs of the poor.

Suggestions

Better public relations and public awareness efforts needed.

In service training for staff.

Expand number of clinics throughout county.

Transportation service for really sick people.

## Salt Lake City-County Jail

The City-County jail was the object of more comments than any other single agency.

Most class members felt that there were many sanitary improvements which could be made with very little or no increase in costs. For example, the sinks and toilets in the holding cells could have been scrubbed frequently. Bedding and towels could have been changed and washed frequently. One person suggested that inmates might be paid to do these cleaning tasks to earn money and/or privileges. All participants agreed that unsanitary jail conditions are dehumanizing and lead to more undesirable behavior rather than less.

Many other comments actually questioned the purposes served by jails in society today. Is a jail merely a place to lock people away from society? Should a jail concern itself with rehabilitation? Most class members expressed the desire to have someone (social worker) or something (activity room with writing materials, books, etc.) to encourage positive behavior. One person suggested a system similar to that in the local detention center where there is a counselor in each section, an exercise room, etc.

Other questions concerned medical care for inmates, and consistency of bail procedures. Medications were taken away during bail procedures and no attempt was made to administer these. Class members suggested that an M.D. or R.N. check health needs of patients at the time of booking or soon after to establish medication schedules or make referrals (in some cases, to detoxification units). There were questions concerning bail procedures. Five class members were "arrested" for the same charge. Two had \$300.00 bail; three had \$100 bail--no explanation was given as to why there was a variance in bail.

### Director's Note:

It should be pointed out that the jail experience was designed to familiarize workshop participants with realities of incarceration--all of the realities. Furthermore, the Salt Lake County Sheriff's Office, aware of our course objectives was extremely cooperative in complying with our needs and made no effort to "doctor-up" its procedures. Coordinators of the experience from the Sheriff's Office were eager to help and encouraged critical feed-back to assist them in their efforts to improve jail conditions. For this reason, the Sheriff's Office is to be commended for its openmindedness and willingness to accept criticism in order to improve the quality of its public service.

Salvation Army  
(Ogden)

Good sanitary conditions

Maintains open doors

Serves coffee and rolls all day

Excellent meals morning and evening.

Serve a variety of needs:

Shelter, clothing, work, spiritual,  
rehabilitation programs for alcohol  
and drug abuse, referral.

Self-government and mutual trust among  
the men in the alcohol rehabilitation pro-  
gram was impressive.

Compassionate concern for one another.

## V.A. Hospital (Nursing Home Care)

Positive

PT and OT programs available.

Staff warm, friendly, and attentive to needs of patients.

Patients treated with respect and given responsibility.

Atmosphere surprisingly positive.

Good food - very nutritious.

Negative

Need to expand staff.

Federal funding received only for in-patients.

Federal administration cut the funds for this program.

## Weber Co. Health Department

PositiveNegative

There is no provision here for helping low-income people who cannot pay for a doctor.

Only services available immediately were for V.D. and T.B. Individual services were hard to get. You must have proof of need.

Lack of clinics for well-baby care and dental care.



APPENDIX O

LEGISLATIVE PROPOSAL FORMAT

Sample Format for Legislative  
Proposal - HE 675W  
Workshop

- I TITLE - Represents general theme and/or intent of proposal.
  
- II PURPOSE - Clear statement(s) of the objectives and long range goals of the proposed program. Be specific.
  
- III FACTORS NEEDED FOR IMPLEMENTATION - Self explanatory
  - A. Personnel
  - B. Facilities
  - C. Equipment
  
- IV FUNDING - Explanation of mechanics of financing the program
  
- V EVALUATION - A discussion explaining how the effectiveness of the program will be determined.

## APPENDIX P

### Diary Excerpts

The start of a night at the detention center started like this:

This was really a nerve wracking experience, we didn't know whether or not we would have to stay in confinement for 24 hours like the newcomers have to. The clanging of doors and keys made me jump everytime I heard it. The night counselor was quite a "bitch" as the girls called her.

After being booked into the County jail:

The sanitary conditions were absolutely horrible. Urine stains were on the sheets, besides being dirty, the blankets smelled bad, the sinks and toilets were dirty and there was vomit around the toilet bowl.

Leaving jail:

I'm really glad I had this experience and I hope I never experience it again unless it's under the same conditions.

Following a morning of walking and checking on housing, health care, and food prices, the reaction of a student observing people leaving a delicatessen was:

This was a low point for me! I saw all the people buying huge cakes and sandwiches and I was hot and tired and hungry. We couldn't buy anything - and I was unwilling to spend my 20¢. I was so tired that I went in front of the supermarket and fell asleep on the lawn for 30 minutes.

The frustration of being poor and attempting to get health care was experienced by a student who role played as an indigent:

After waiting in line for over one hour to attempt to get health care from a Neighborhood Health Center, I was told I had to go to the Welfare services. I was given the run around from office to office and finally denied service.

A reaction following participation in a Salvation Army rehabilitation program for alcoholics:

We went and listened to their testimonies about the program. What was striking was the similarities of their backgrounds and experiences. They were all from the South and came here because they weren't making any money back there. They hopped freight trains and learned to exist on the street. Most of the men had prison records. Two of the men were in their early 30's.

Just before re-entry into the normal life of a student:

One thing that occurs to me now is that I'm sort of reluctant to get back to the rigors and schedule that I will be forced to enter again. Nevertheless, the security of ownership - my own bed, house, etc., is comforting. Not belonging, not having seems to make a person feel like less of a whole person. Also, familiarity is a comfortable feeling. Always being on the move, made me feel wary and on the defensive.

After spending three nights and four days on the street, a reaction concerning health care:

Making people aware of the service available. This can be done by advertising all the programs.

Reaction to an Alcoholics Anonymous meeting:

The A.A. meeting was really something. I think it was the most moving, sincere interchange of feeling in a group that I've ever seen. These men are, to a man, obviously under tremendous strain and pressure everyday of their lives. They know they are alcoholics. They know it's a disease. They know they need help.

Walking through a poverty area:

I noticed something terrible about the neighborhood. The streets had enormous piles of dirt and garbage in various locations. I noticed that the homes had various grades of structure. Some of them looked like they were made out of cardboard and that they were constructed in the early 1900's.

In talking to a public health nurse we found out that:

We were now in "no man's land," labelled as area X where people had no water, telephones, fire hydrants, or school bus service. One woman had killed 16 rats in her yard the day before.

## BIBLIOGRAPHY

- Allport, Gordon W. Personality and social encounter: selected essays. Boston: Beacon Press, 1960.
- Anderson, C. R. Measuring behavioral learning: a study in consumer credits. Report No. R-67, May 1970, John Hopkins University, Grant OEG 2-7-061610-0207, United States Office of Education.
- Baty, R. M. The effect of cross-cultural inservice training on selected attitudes of elementary school teacher volunteers: a field experiment. 1970, Stanford University, Contract Nonr. OEC-4-7-062597-1654, U. S. Office of Education.
- Bennett, L. M. A study of the comparison of two instructional methods, the experimental field method and the traditional classroom method, involving science content in ecology for the seventh grade. Science Education, 1965, 49, 453-468.
- Boy, Angelo V., & Pine, G. Expanding the self - personal growth for teachers. Dubuque, Iowa: Wm. C. Brown Company, 1971.
- Clore, G., & McMillan, J. K. Emotional role playing, attitude change, and attraction toward a disabled person. Paper presented at the meeting of the Midwestern Psychological Association, Detroit, Michigan, May 1971.
- Corporation for Public Broadcasting. Final report-public broadcasting environment center. Washington, D.C. Office of Education, U. S. Department of Health, Education, and Welfare, 1970.
- Culbertson, F. Modifications of an emotionally-held attitude through role playing. Journal of Abnormal and Social Psychology, 1957, 54, 230-233.
- Dewey, John. The school and society. Chicago: University of Chicago Press, 1900.
- Diamond, M. J., & others. When familiarity breeds respect: toward the depolarization of police and students' attitudes toward each other. Paper presented at the annual meeting of the Western Psychological Association, San Francisco, April 1971.

- Eiszler, C. F., & Kirk, B. V. Achievement and attitude change in Michigan migrant education, summer classrooms. January 1971, Central Michigan University, Michigan Migrant Education Center.
- Foshay, Arthur W. Curriculum for the 70's: an agenda for invention, schools for the 70's, preliminary series. Washington, D.C.: Center for the Study of Instructions, National Education Association, 1970.
- Greenberg, H., Pierson, J., & Sherman, S. The effects of single-session education techniques on prejudice attitudes. Journal of Educational Sociology, 1957, 31, 82-86.
- Gutek, G. L. Pestalozzi and education. New York: Random House, 1968.
- Harmon, S. K. A comparison of lecture and experiential learning models in teaching human ecology. Doctoral dissertation, University of Utah, 1973.
- Hawkins, D. E., & Vinton, D. The environmental classroom. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1973.
- Hilgard, E. R. Theories of learning. New York: Appleton-Century Crofts, 1958.
- Hunt, D. E., & Hardt, R. H. The effect of upward bound programs on the attitudes, motivation and academic achievement of negro students. Journal of Social Issues, 1969, 25, 117-129.
- Janis, I., & Mann, L. Effectiveness of emotional role-playing in modifying smoking habits and attitudes. Journal of Experimental Research and Personality, 1965, 1, 84-90.
- Kidder, S. J. Emotional arousal and attitude change during simulation games. Report No. R-3, August, 1971, John Hopkins University, Contract Nonr OEG-2-7-061610-0207, U. S. Office of Education.
- Komensky, J. A. The analytical didactic of comenius. Chicago: The University of Chicago Press, 1953.
- Livingston, S. A. Simulation games and attitude change: attitudes toward the poor. Report No. R-63, April, 1970, John Hopkins University, Contract Nonr OEG-2-7-061610-0207, U. S. Office of Education.
- Madison, Donald. The student health project: a new approach to education in community medicine. The Milbank Memorial Fund Quarterly, 1968, 46, 389-408.

- Matefy, R. E. Attitude change induced by role-playing as a function of improvisation and role-taking skill. Journal of Personality and Social Psychology, 1972, 87, 343-350.
- Mussen, P. Some personality and social factors related to changes in children's attitudes toward negroes. Journal of Abnormal and Social Psychology, 1950, 45, 423-441.
- Osgood, C. E., Suci, G., & Tannenbaum, P. The measurement of meaning. Chicago: University of Illinois Press, 1957.
- Overcash, J. R. Environmental study in the city. The Science Teacher, February, 1971, 38, 18-20.
- Polley, G. W., McAllister, L. W., Olsen, T. W., & Wilson, K. P. Mental health training for county welfare social work personnel: an exercise in education and community organization. Community Mental Health Journal, 1971, 7, 29-38.
- President's Committee on Health Education. The report of the President's committee on health education. Washington, D.C.: U. S. Department of Health, Education, and Welfare, 1973.
- Rich, J. M. Learning by doing: a reappraisal. The High School Journal, May, 1962, 45, 338-341.
- Rillo, T. J. Toward an urban ecological structure. Journal of Environmental Education, Spring, 1971, 2, 40-43.
- Rogers, Carl R. Freedom to learn. Columbus, Ohio: Charles E. Merrill Publishing Company, 1969.
- Rogers, Carl R. Toward a science of the person. In Behaviorism and phenomenology, T. W. Wann, ed., Chicago: Phoenix Books, University of Chicago Press, 1964.
- Rokeach, Milton. Long-range experimental modification of values, attitudes, and behavior. Paper presented as part of a symposium, Human Behavior and Its Control at the annual meeting of the American Association for the Advancement of Science, Chicago, December 30, 1970.
- Schorow, Mitchell (Ed.). Hearing on issues and trends in medical care. Salt Lake City: Intermountain Regional Medical Program, 1969. Pp. 47-65.

- Siegel, S. Nonparametric statistics for the behavioral sciences. New York: McGraw Hill, 1956.
- Smith, F. An experiment in modifying attitudes toward the negro. New York: Columbia University Press, 1943.
- Stapp, W. B. Environmental education opportunities, encounters and experiences with natural, physical, and social environments. Paper presented at the National Consultation on Environmental Education Areas and Faculties, Belmont Center, Maryland, June 1970.
- Stapp, W. B. Environmental encounters. Journal of Environmental Education, Fall, 1970, 2, 35-41.
- Taylor, G., & Smith, K. H. The effect of anticipating the continuation of role-playing on attitude change. Journal of Social Psychology, 1972, 87, 205-211.
- Thompson, O., & Frederick, T. Comparison of the effectiveness of a pupil-centered vs. a teacher-centered pattern of teaching vocational agriculture. Journal of Educational Research, May, 1957, 50, 667-678.
- Twomey, J. F., & Kiefer, F. Attitude changes following education in interpersonal dynamics among attendants in a state hospital for the criminally insane. Psychological Reports, 1972, 30, 989-990.
- Van Til, W. Education: A beginning. Boston: Houghton Mifflin Co., 1971.
- Webb, E., Campbell, D., Schwartz, R., & Sechrest, L. Unobtrusive measures. Chicago: Rand McNally and Company, 1966.
- Weidner, E. W. Problem-focused education: the environment. Educational Record, Fall, 1971, 52, 314-320.
- Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill Book Company, 1971.
- Wise, R. C. Outdoor versus indoor learning in elementary school science. Doctoral dissertation, The Pennsylvania State University, 1970.
- Zacker, J. W. The effects of experiential training upon empathy, interpersonal sensitivity, cynicism and alienation in police recruits. Unpublished doctoral dissertation, The City University of New York, 1971.