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ABSTRACT

This study sought to determine if changes occur in preservice students' self-concepts during the quarter they are enrolled in an elementary education methods course. Subjects were 24 elementary education majors in their junior or senior year prior to student teaching. Pre- and post-testing instruments were the Tennessee Self-Concept Scale (T.S.C.S.) and a student questionnaire assessing the students' attitudes toward their teacher education program. The null hypothesis tested was that there would be no significant difference in self-concept as measured by the T.S.C.S. in students' scores at the end of the course. Findings indicated that the null hypothesis could not be rejected. Results differed on the T.S.C.S. and the student questionnaire on students' attitudes toward their teacher education program. The questionnaire indicated a stronger response to a positive self-concept change, while the T.S.C.S. scores reflected only a significant score. It was concluded that the findings from the T.S.C.S. combined with the questionnaire seemed to support the idea that a positive change in student self-concept had begun although not at significant levels. Scores from the T.S.C.S. and student questionnaire are included. (JD)

AFFECTIVE EVALUATION OF THE ELEMENTARY METHODS COURSES AT SOUTHERN UTAH STATE COLLEGE

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June 1982

CONTENTS

Chapter 1

INTRODUCTION

Humans have long realized the importance of self-concept. Greek philosophers, such as Socrates, stressed the idea of self-examination and self-improvement and if not examined few lives were worth living. More recently, many authors have written about self-concept in relation to school, students, teachers, learning, and achievement. The relationship examined is between the teacher and student. One book published by the Association of Supervision and Curriculum deals with this relationship and the implications of the truly adequate person in teaching. Combs (1962), presents in Chapter 9 the idea that teachers play a crucial role in the development or destruction of student self-concept by the behaviors and attitudes that reflect their own. Felker (1974), DeMante and Sorgman (1973), echo these ideas that teachers are instrumental in development of student self-concept. Felker states, "The roles of the school in self-concept development and of the teacher as the main agent of the school are crucial." (p. 63). DeMarte and Sorman clarify the teacher's role:

> . . .yet one dimension which has been identified is that of teacher self-perceptions. These perceptions have been found to influence the teacher's perceptions of others, students' self-perceptions, and the teacher's classroom behavior (1973)

Because of the importance of the teacher in developing students self-concept, there is a vital need to prepare and employ teachers that

enhance a positive self-concept rather than a negative. The teacher needs to have an accurate view of self and feel good about what he is, in order to be most effective in allowing students to become better developed in self-concept. The better the self-concept of the teacher, the more open and positive they can be with students, parents, and others. This helps to stimulate the development of positive self-concept in those with whom they associate (Purky 1970).

What is needed then is a program that allows teachers or those wanting to become teachers to move in positive directions to develop their own self-concepts.

The Problem

This study was to determine if the methods courses in elementary education at Southern Utah State College enhance the self-concept of pre-service students. The results of the study were used to evaluate the program against its objectives and recommend changes to improve the program and meet the objectives.

Statement of the Problem

It was the purpose of this study to determine if positive changes occur in pre-service students' self-concepts during the quarter they are enrolled in the elementary education methods courses by using the Tennessee Self-Concept Scale and a student questionnaire. Included were the methods courses in Mathematics, Science, Language Arts, Social Studies, Curriculum, and Practicum. Students enrolled for these six courses in one quarter. This study used the students enrolled in

the above courses during the fall and winter quarters of the 1981-82 year for data analysis.

Hypothesis

To determine if this program was successful in enhancing the self-concept of pre-service teachers the following null hypothesis was tested.

There was no significant difference at the $p < .05$ level in the self-concept as measured by the Tennessee Self-Concept Scale in students pretest and posttest scores at the end of the quarter they were enrolled in the elementary methods courses.

Limitations

This study is limited in the manner in which it can be generalized because of the limited number of subjects and the selection procedure, both of which were determined by uncontrollable factors.

Definition of Term

The following term was defined for the purpose of this study:

Self-Concept -- a set of expectancies, plus evaluations of the areas or behaviors with reference to which these expectancies are held (McCandless 1976).

Justification

This project utilized the pretest, posttest design to test the hypothesis. Data was gathered during two consecutive quarters

on students enrolled in the elementary methods courses. This data was then analyzed using paired t-tests to determine changes in posttest scores. Data from the student survey was compared with the paired t-test results to determine correlations. Information gained from this study did provide a basis for changes made in the elementary program. Changes were made to better structure the program to meet its goals.

Organization of Report

The organization of the paper is as follows: Chapter 1 introduces the study and gives background information. Chapter 2 reviews the relevant literature. Chapter 3 describes the methods and procedures used in this study. In the fourth Chapter the data is reported and the analysis of the data is done. Chapter 5 is a summary stating the findings, recommendations, and conclusions.

Chapter 2

REVIEW OF LITERATURE

It was the purpose of this study to determine if positive changes occur in pre-service students' self-concept at the end of the quarter they were enrolled in the methods courses in elementary education by using the Tennessee Self-Concept Scale and student responses on a questionnaire. Twenty-six students were enrolled in six courses while the study was being conducted. These courses were Mathematics, Science, Language Arts, Social Studies, Curriculum, and Practicum. The study gathered data on the students enrolled in these courses and fall and winter quarters of the 1981-82 school year for data and anlysis.

A review of the literature included dissertation abstracts, periodicals, Current Index to Journals in Education, and Educational Resources Information Center to gather sources relating to self-concept change. Educational Resources Information Center discriptors used were pre-service teachers, teacher education, self-concept, elementary education, affective objectives and course evaluation.

Organization of the review is under the headings of self-concept of teachers, factors effecting self-concept growth and development, and program evaluation.

Self-Concept of Teachers

Teacher self-concept or self-perceptions influence teacher behavior and students' self-concept. This view was extended by Combs (1962) who believed that school effects the students in a positive, negative, or indifferent way depending on the attitudes and behaviors expressed by the teacher. More support for the importance of teacher perceptions comes from Rogers (1965). He expounds the idea that teacher perceptions may be the most critical factor in teaching. Rosenthal and Jacobson (1968) in a landmark study show that school achievement can be raised by how the teacher perceives the student. Other studies by Fox (1973), Spaulding (1963), Reed (1962), Cogan (1958), show increased achievement in individual academic subjects within the school when the teacher perceives the students in a positive manner. These findings suggest that students achievement in academic subjects, as well as in school as a whole, can be increased.

A decrease in student self-concept was evident in a study by Felker (1974). He found that during the school year students' self-concept decreased overall from the second to the eighth grade. A study recently completed by the Utah State Board of Education gives support to the study by Felker. It showed that the academic self-concept of fifth and eleventh graders has declined from the previous study conducted in 1978 Ellison (1982). There are no automatic increases in academic self-concept just because students are in school. Experiences designed to enhance these areas should be emphasized in educational goals and school policy to prevent a continued decline, increase

student self-concept, and promote better school achievement. It is necessary to identify pre-service teachers whose personality traits can enhance their self-concepts, and develop their skills to do so. DeMorte and Sorgman (1973) suggest that teacher self-concept must be a concern of the teacher education programs to produce teachers who can have a positive impact on their students' self-concept instead of negative as shown in the above studies. They undertook the task of indentifying some effective ways of developing positive self-concept in teachers. Evaluation of teacher education programs included in their study produced some empirical evidence showing that humanistic education courses tend to improve the real self-image of teachers at a significant level. Teacher education should not be solely concerned with grade point average and intellectual processes but also consider factors such as health, interest in teaching, communication ability, academic content knowledge, potential for success, and positive self-image which enables others to freely learn was a position stated by Combs (1962).

Factors Effecting Self-Concept Change

Research pertaining to change in self-concept due to specific course content is sparse. What research is available falls into the two major categories of outdoor experiences and human relations training. Even these two areas are not distinct as mentioned by Rhudy (1979). He names the group living experience as one of the five essential factors that make the outdoor experience a factor in

self-concept change; this links these two areas and makes separation impossible. Rosenfield (1978) goes further to state that two of the three factors necessary to change self-concept, sharing of ones self with others and receiving feedback from others, only occur in the framework of social experience. Though general, these statements present the problem of serarating the two areas into distinct activities while showing the integration inherent in most programs of this type.

One program that spawned many studies and provided considerable data was the Outward Bound Program designed by Kurt Hahn (1941). Studies of this program have focused on educational personnel in teaching, both pre-service and inservice, and administrators to determine if their self-concept was improved as a result of having participated in the program. Results from these studies (Smith et. al. 1975) are inconclusive giving no clear answer because of both significant and non-significant changes occuring. However, there was evidence that showed that the self-concept is enhanced in participants who complete the program but not always at the level of significance (Hendy 1975, Gillette 1972, Godfrey 1972).

The essential factors that need to be incorporated into the Outward Bound or any other program have been identified by Rhudy (1979) as stress, group living experience, group and individual success, new environment, and individual experience separate from the group. It is obvious that these elements exist in many experiences besides those encountered in outdoor programs. A study conducted by Lambert (1979) compares two college nurses which included wilderness experience with

two that did not. The results indicated that while the wilderness experience had a significant positive impact on student self-concept one of the other two courses, human relations training, had a positive impact although not at a significant level. This suggests that these elements can be used to structure a normal academic course and procude an effect in a positive direction on the self-concept.

The human relations aspect is something that has been identified as important in several studies. Again Rhudy listed two of the five critical elements as dealing with the group experience during the outdoor activities. Because of this and work done by Miller (1980) who analyzed the effects of a human relations component on teachers self-concept, it is questionable as to what really causes the changes in self-concept, but it is evident that there is a positive change with the use of both.

Program Evaluation by Affective Objectives

There is little literature related to program evaluation using affective objectives. However, there is a substantial body of literature dealing with the affective domain and affective objectives. Krathwohl et. a. (1964) devloped a taxonomy for the affective domain which includes the receiving, responding, valuing, organization of values, and characterization of values these behaviors are the foundation of the affective domain. Raths (1966) built upon Krathwohl's work in developing the valuing process of choosing, prizing, and acting. These two people along with several others

(Simon, Harmin, Kirschenbaum) brought the affective area into consideration as an important area in the planning of objectives. Their work enabled teachers to use affective objectives in planning for instruction. If affective objectives are included in the instruction then there should be evaluation designed for these objectives but, little evidence exists to support the fact that affective objectives are heavily used by teachers at any level of planning or instruction.

Two articles were found, Evans (1978) looked at the effects of a program on students, and Nehari (1978) related to education but not to program evaluation. Evans' study dealt with the use of affective objectives for preservation of architectural design. The use of a semantic differential scale showed positive results and confirmed similar experiences using this program. The other study judged a college course using a conceptual model for meaningfulness and value. These two studies both used student evaluation to determine the effect that the courses had upon the students. This would support the student evaluation method used in this project.

In view of the lack of literature in this area, it seems that the logical steps of designing affective objectives, use of affective objectives in planning and instruction, and evaluation by affective objectives has not come to pass. This seems to strengthen the reasons for completing this project.

Summary

Much has been written about the effect of self-concept and the school. Teachers, achievement, home, and students have been studied to gain more knolwedge about how the self-concept is or is not related to these areas. Several factors such as human relations training and wilderness experience have been identified as being critical in the reshaping of the individual's self-concept. By using these elements in a course setting it has been possible to effect changes in students self-concept. There is evidence to suggest that the self-concept plays a major part in determing how a person will respond to others which will in turn effect the self-concept again. Although this evidence does exist there has been little done to incorporate it into the teacher education programs and evaluation of teacher education by affective objectives is virtually non-existant.

Chapter 3

RESEARCH DESIGN

The purpose of this study was to determine if positive changes occur in pre-service students' self-concepts during the quarter they are enrolled in the methods courses in elementary education by using the Tennessee Self-Concept Scale and an education questionnaire for students. Changes were determined by using a paired t-test to analyze differences in pretest and posttest scores. The student questionnaire was developed to determine the impact of the courses and content by student response on a Likert five point scale. Subjects consisted of elementary education majors in their junior or senior year prior to student teaching. In order to determine if this program was successful in enhancing the self-concept of pre-service teachers the following null hypothesis was tested: There was no significant difference at the $p < .05$ level in the self-concept as measured by the Tennessee Self-Concept Scale in students pretest and posttest scores at the end of the quarter they were enrolled in the elementary methods courses.

A study of this nature was undertaken to provide information concerning the undergraduate program in elementary education. One of the program's objectives is the development and maintenance of a healthy self-concept. This stems from a goal to develop a program that has a positive impact on student self-concept. The results of

this study will be used to evaluate the program and recommend changes. Direction for the program comes from the work of Rogers, Kelly, Maslow, Combs, and Hamacheck who started the work on self-concept in the sixties. Purkey, Felker, Beers, and others build upon that work in the next decade and now it is being implemented.

Selection and Description of Subjects

Subjects were elementary education majors in their junior or senior year of school. All had completed the admissions criteria for acceptance into the teacher education program. This included a grade point average of above 2.5, American College Test or Standard Achievement Test composite scores of 19 or better or passed a departmental exam, and have recommendations. One minority, Native American, was represented in the study. The rest of the sample consisted of Anglos. Geographic information showed that the subjects came from three main areas in Utah, Salt Lake County, Iron County, and Washington County. During fall quarter there were eight students enrolled in these courses. Winter quarter there were eighteen students enrolled in these courses. Of the twenty-four subjects enrolled, seven were male and seventeen were female. This represents the total population of students enrolled in these courses during the fall and winter quarters of the 1981-82 school year..

Instrumentation

The clinical and research form of the Tennessee Self-Concept Scale was used in this study to provide information on the students' self-concept. This test was selected because of its wide spread usage with similar subjects and programs that deal with self-concept change. This test was developed by William Fitt, Ph.D. in 1955 and updated in 1965. Reliability coefficients for the various segments fall mostly in the .80-.90 range in a test-retest situation. Content validity was determined by unanimous agreement by seven clinical psychologists. Twenty-nine scores are reported and profiled on the clinical form. These are related to how individuals see themselves and also some data on how the responses were distributed.

The student questionnaire was developed by Southern Utah State College Research and Development Department for use in the teacher education department. Its purpose was to assess the students' attitudes about the teacher education program at Southern Utah State College. Responses were sought from all graduates of the department and then those who had been in the elementary education program were identified for inclusion in the study.

A Likert scale is the format used on the questionnaire with five selections available. Only two questions are pertinent to this study, those being questions 14 and 15 with twenty-one items. The responses give an indication of how the student feels the goals of the program were accomplished and how relevant the course's activities

were to affecting student self-concept. A copy of the questionnaire is included in the appendix.

Procedures

In order to determine if this program was successful in enhancing the self-concept of pre-service teachers the following null hypothesis was tested:

> There was no significant difference at the p .05 level in the self-concept as measured by the Tennessee Self-Concept Scale in students pre-test and posttest scores at the end of the quarter they were enrolled in the elementary education methods courses.

The student questionnaire was developed during the spring of 1981 and sent out to all graduates of the school of education. All responses were then separated into categories of elementary and secondary students with the elementary being tabulated for analysis.

A review of the literature was begun during the summer of 1981 to establish the extent of research available in the areas of self-concept and program evaluation. The review was concluded during the spring of 1982.

In order to test this hypothesis a pretest was given the second day of class and a posttest given the last day of class before finals during both quarters used in the sample. This data was then analyzed using the Pennsylvania statistical package on a computer.

The theory behind the blocking together of these courses is to more closely approximate the situation encountered in the elementary school. Teaching is a stressful job. Pressure from interpersonal

relations, curriculum, time, priorities, and conflict all combine to produce what is called teacher burnout if not handled in an adequate manner. By reproducing some of these stressful situations and providing successful ways in which to deal with them, a better prepared teacher may result. While this may help in providing a look at what may happen in the schools, a more realistic view is obtained by placing the students in various schools for a week at a time where they are able to apply and test their knowledge of curriculum, teachers, and students. During the time that the study was being conducted the professors involved in teaching the courses were not aware of the study. This was done to help eliminate any bias or differences in teaching because they were involved in a research project. Also there was a change in professors between fall and winter quarter to see that it was the program that accounted for any change in self-concept and not the professors involved. By changing instructors and keeping them unaware of the study, it was felt that the program would be better isolated and studied. No special curriculum was developed for this study. The normal syllabi were used without change and standard teaching methods used prior to the study were continued. The emphasis in the courses was to develop teaching methods or strategies for use in the school setting. Application of knowledge was stressed rather than the acquisition of content.

Data Analysis

The one group pretest-posttest design was selected as the research design for this study. A major factor in the selection of this design was that there was no group available for a control group. All elementary majors are required to take these courses and so there was no comparison group available. This data was analyzed by using a paired t-test to compare means with the level of significance being set at $p < .05$. The t-test was used to check for significant differences between the pretest and posttest scores. Because of the possibility of the self-concept being resistant to change in the time frame of one quarter additional data was gathered through the use of a questionnaire for students. Data from this questionnaire was tallied then alayzed in a scalogram which provided data indicating how significant subjects felt the program was in effecting their self-concepts.

The pretest posttest statistical design was selected because of the absence of a control group in the population. Measures were taken to correct for some of the weakness of the design. Although there are weaknesses inherent in this statistical design, they have been controlled as much as possible. Following is a description of the procedures used to control for the weaknesses of the design. The weakness of history has been somewhat controlled by the large amount of time spent together by the groups, therefore much of the events of history would be common for the group. Maturation would be controlled by the various age groups represented. Instrumentation

by the fact that the test was objective and does not change nor does the scoring. Regression was not a minus because of the randomness of the group.

Summary

The purpose of this study was to analyze the effect upon pre-service teachers' self-concept of the methods courses in elementary education at Southern Utah State College.

Population sample consisted of all of the students enrolled in the methods courses during the fall and winter quarters of the 1981-82 school year.

Paired t-tests and a questionnaire were analyzed to determine positive changes in the self-concept of the subjects.

Chapter 4

PRESENTATION AND DISCUSSION OF FINDINGS

It was the purpose of this study to determine if changes occur in pre-service students self-concepts during the quarter they are enrolled in the elementary education methods courses by using the Tennessee Self-Concept Scale (T.S.C.S.) and a student questionnaire. This study was conducted to see if the elementary methods courses were effecting the affective domain of students as stated in the goals of the program. A change in the self-concept of the students after having taken these courses would be seen as evidence that the program was achieving its stated goals.

A review of the literature found that several studies had dealt with a similar topic but had not dealt with the same population. Work had been done to document the effect of several types of affective strategies such as human relations training and outdoor experiences to improve the self-concept of individuals enrolled in the courses. These showed mixed results but did show promise enough to warrant further study.

The procedures carried out were to pretest the sample and then at the conclusion of the courses posttest. The sampe consisted of all students enrolled in the elementary methods courses during the fall and winter quarters of the 1981-82 school year. These students are juniors and seniors who are majoring in elementary education.

This provided the data to analyze to determine if the courses had made an impact on the self-concept. This plan was carried out for the fall and winter quarters of the 1981-82 school year. Also at this time a questionnaire was sent out to the graduates of the school of education assessing their perceived notions of the effectiveness of the program in relation to its stated goals.

Findings

Paired t-tests were run on the data at the p .05 level to show significant differences between the pretest scores and the posttest scores. Analysis of this data does not allow the rejection of the null hypothesis. Only one area in the T.S.C.S. was significant below the .05 level and it was significant at the .0461 level.

The results from the questionnaire showed a different picture in that the majority of the students responded in the highly effective and highly achieved areas on the student questionnaire. The difference in questionnaire responses shows that the students feel that the courses are highly effective in maintaining and developing a positive self-concept and this objective is highly achieved.

Questions subjects responded to were more general on the questionnaire than on the T.S.C.S. and given after a longer time away from the methods courses. Complete analysis of the data is included in Tables 1 and 2 in the Appendix.

Summary

Analysis of the findings indicate that the null hypothesis cannot be rejected at the .05 level. Results differ on the T.S.C.S. and the student questionnaire with the questionnaire showing a stronger response to a positive self-concept change. T.S.C.S. scores reflect only a significant score.

Chapter 5

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to determine if positive changes occur in pre-service students' self-concept during the quarter they are enrolled in the elementary education methods courses by using the Tennessee Self-Concept Scale and a student questionnaire. This study was conducted to see if the elementary methods courses were effecting the self-concept of students as hypothesized. A positive change after having taken these courses would be seen as evidence that the program was successful.

Findings

Findings of this study indicated that the null hypothesis, which stated that there was no significant difference in self-concept at completion of the methods courses, could not be rejected.

The following findings were drawn from the data:

1. The area of neurosis showed an improvement over the pretest scores significant at .0461.
2. Other scores were closer to significant levels and may indicate a change.
3. Sixty-seven percent of the resonses on the student questionnaire indicate that the courses develop and maintain a healthy, positive self-concept to a high degree.

Conclusions

From the results of this study it was concluded that the methods courses should be continued because of the absence of negative responses. These scores may indicate a positive trend if more data were accumulated. Students felt quite positive about the course's affect on them.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are made:

1. The present design of the methods courses should be continued to further allow research in this area.
2. Extend the time frame for studies to increase the number of subjects and provide more longitudinal data.
3. Specify objectives that relate to the T.S.C.S. if it will be used as the test for self-concept change.

Discussion

The findings from the T.S.C.S. combined with the questionnaire seem to support the idea that a positive change has begun although at levels not reaching significance. This may be a result of the stable nature of the self-concept and its slow rate of change. It might take an extended amount of time to reflect these changes in attitude at significant levels. In order to better interpret the results of this study, there should be a greater n and more quarters of data to see if trends occur. Different testing

times such as several months after the methods courses may help clarify the differences between the responses gathered in this study because of the stable nature of self-concept. While these courses do seem to be effecting the self-concept in a positive manner, this may also be the case for all courses. An enlarged study would look at several courses across campus to determine if this was confined to the elementary methods courses.

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Table 1

Scores from the Tennessee
Self-Concept Scale

Score	Mean	T-Value	Significance Fall	Winter	Mean	T-Value
Self Crit.	- 2.5	-1.65	.1422	.8718	- 5.85	.163
T/F Ratio	- .06	- .627	.5506	.1449	- .02	1.51
Net. Con.	- 3.24	- .73	.4890	.1254	1.35	1.59
Tot. Con.	- 7.0	-1.66	.1399	..1474	11.1	1.50
Tot. Tot	13.0	1.57	.1603	.9551	28.2	- .08
1	2.15	1.085	.3139	.6657	9.08	.438
2	7.87	2.027	.0822	.7148	11.5	- .037
3	3.0	.97	.3645	.9631	10.8	- .47
A	1.85	.776	.4631	.8915	8.01	.138
B	3.62	1.57	.1600	.7519	- 5.02	.320
C	2.25	.805	.4473	.8192	6.64	- .23
D	3.37	1.39	.2070	.9791	6.44	- .02
E	1.87	1.02	.3389	.5878	4.61	- .55
Tot. Var.	- 6.5	-1.3	.2148	.7335	- 9.6	.345
Col. Tot.	- 5.6	-1.9	.0984	.8233	9.33	.226
Row Tot.	- .87	- .33	.7477	.6180	5.10	.506
D	2.25	.186	.8580	.8135	29.1	.239

Table 1 (Continued)

Score	Mean	T-Value	Significance Fall	Winter	Mean	T-Value
5	.375	.095	.9269	.6044	13.6	.526
4	-2.5	- .61	.5594	.7389	7.71	- .33
3	.50	.095	.9273	.9446	10.1	.070
2	- .75	- .18	.8625	.5373	5.00	- .62
1	2.37	.477	.6481	.8981	9.92	.130
AP	3.87	1.31	.2293	.8063	9.19	- .24
GM	1.37	.67	.5244	.8785	6.20	- .15
PSY	1.0	.78	.4608	.7176	3.49	- .36
PD	3.87	1.07	.3196	.8746	- 7.9	.160
N	6.12	2.42	.0461	.8377	-11.	- .20
PI	1.37	1.07	.3187	.4743	2.31	- .72
NAS	2.75	1.26	.2454	.8590	10.5	- .18

Table 2

Responses from Student Questionnaire

Question	Amount Achieved				
	Not	Slightly	Moderately	Highly	Mastery
14	4	5	13	53	4
B	0	4	18	50	11
C	2	7	32	33	8
D	2	8	28	39	4
E	2	7	23	40	10
F	0	3	27	44	8
G	0	5	24	44	8
H	1	10	16	42	13
I	9	8	28	35	8
J	1	7	24	44	4
K	2	7	24	44	4

Table 2 (continued

	Did Not Participate	Effective: Slightly	Moderately	Highly	Dramatically
A hikes	12	8	19	35	8
B overnight camp	43	4	6	13	5
C snow shoeing	48	4	6	11	5
D competition	12	8	4	12	6
E airplane ride	42	9	4	12	6
F scuba dive	56	3	1	12	4
G rappelling	36	8	8	17	8
H mortuary	40	7	13	8	3
I eating sheep	37	9	5	10	6
J living w/family	36	6	8	17	

Table 2

Responses from Student Questionnaire

Question	Amount Achieved				
	Not	Slightly	Moderately	Highly	Mastery
14	4	5	13	53	4
B	0	4	18	50	11
C	2	7	32	33	8
D	2	8	28	39	4
E	2	7	23	40	10
F	0	3	27	44	8
G	0	5	24	44	8
H	1	10	16	42	13
I	9	8	28	35	8
J	1	7	24	44	4
K	2	7	24	44	4

	Did Not Participate	Effective		
		Slightly	Moderately	Highly
A hikes	12	8	19	35
B overnight camp	43	4	6	13

Table 2 (Continued)

Dramatically	Did Not Participate	Effective		
		Slightly	Moderately	Highly
C snow shoeing	48	4	6	11
5				
D competition	12	8	4	12
6				
E airplane ride	42	9	4	12
6				
F scuba dive	56	3	1	4
4				
G rappelling	36	8	8	17
8				
H mortuary	40	7	13	8
3				
I eating sheep	37	9	5	10
6				
J living w/family	36	6	8	17