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## ABSTRACT

This interim evaluation of the Missouri Environmental Studies Approach (MESA) for the period July 1972-June 1973 measured attainment of three objectives, which state that (a) participating teachers will use Environmental Studies (ES) materials in their teaching as a result of two intensive workshops during the summer of 1972; (b) the teacher's role will change so that students will take more responsibility for learning, and the teacher will tend to use the open classroom approach; and (c) students will learn to use the total environment as resource material. The first objective, which was measured by the number of assignments teachers gave directly from, or modeled on, ES materials, was attained. The second objective was evaluated by an outside consultant who reported that teachers roles had indeed changed as a result of implementation of the Environmental Studies Approach. The third objective was measured by two tests: the "About Me Test" and the "Positive-Negative Adjective List." The results of both of these tests showed that children's self-concept and self-esteem were improved. A national evaluator of the ES approach commented that MESA project results were more pronounced than the national results which showed that (a) students using ES learned more content pertaining to environment than control students and (b) ES materials fostered more decision making on the part of both students and teachers and helped to improve students! self-image. (HMD)





# MISSOURI ENVIRONMENTAL STUDIES APPROACH (MESA)

PROJECT NO. 35-72-06-0

BEST COPY AVAILABLE

JULY 1, 1972 - JUNE 30, 1973

INTERIM EVALUATION REPORT

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# INTERIM EVALUATION SUMMARY OF MISSOURI ENVIRONMENTAL STUDIES APPROACH (MESA PROJECT) ESEA TITLE III (PL 89-10)

Attempts to evaluate projects which are primarily directed at altering affective areas, of necessity, are dealing with relatively ill-defined instruments.

The various instruments which have been used by the national program were adopted. These instruments and their intended purpose/clientele are:

- A. Classroom Practices Inventory. This instrument was developed by the ES staff in order to attempt to get a measure on the classroom practices that are consistent with openness in the classroom. The instrument is administered to the teacher.
- B. Seating Chart Inventory. This instrument is based on work done by Fred C. Feitler of the Southern Tier Regional Education Center. The purpose of this measurement is to examine the relationships between inter-personal needs and the physical setting of the classroom based upon five assumptions. The instrument is administered to the teacher.
- C. Classroom Assessment Charts. This is an instrument that is based on work done by Anne M. Bubis and Edward A. Chittenden at the Education Development Center along with ETS (Educational Testing Service). It is reported in ETS publication PR-70-13 "Analysis of an Approach to Open Education." In essence it is an attempt to determine who contributes to the decisions of the classroom. If "ES" materials do develop "open" sorts of classroom practices then the locus of control of classroom decisions should shift through the year as indicated on this instrument. The instrument is administered to both the teacher and the students.
- D. <u>ES Outcomes--Monthly Report</u>. The items on this instrument will come directly from the MESA teachers. The teachers will be recording those types of activities which they have found participating in the MESA program. This instrument was to have been completed by the teacher.



- E. About Mc Test. This is a self-concept test developed by James Parker of Georgia Southern College. Of about 10 such instruments that the ES staff seriously considered using, this test was received best by students in a pre-use trial of the instruments. This instrument is administered to the student.
- F. <u>Positive-Negative Adjective List</u>. There is, of course, a lot of research on the notion of self-description as a means of measuring completed by both the students and the teacher.

These instruments have unusual formats; in particular "C" which requires distribution of points on a rectangular coordinant display. In order to familiarize them with these devices, the teacher (participants) were required to complete these same instruments several times. This familiarization was particularly essential since the teachers would be administering several of these items to their students throughout the year.

A number of consultations were held with the national Environmental Studies staff at Boulder, Colorado. Mr. Robert Lepper, who has been responsible for the present statistical analysis, gave several suggestions to the MESA staff.

The several modifications, deletions, and additions implemented in accord with Mr. Lepper's reactions are:

- 1. D. Monthly Tally Sheet was deleted in favor of a locally prepared simplified check sheet.
- 2. Children who could not read were instructed to draw pictures of themselves in relation to the school (the intent being to identify changes in children's perception of themselves and growth of their selfconcept).
- 3. Questionnaires-Surveys were developed by modifying a Jefferson County, Colorado, Evaluation Instrument for the Open Living School (1971). These instruments were:

Parental Questionnaire Administrative Questionnaire Student Questionnaire Teacher Questionnaire



Each of these instruments were intended to determine the degree of open classroom procedures generally and the growth of realistic positive self-concepts by both teachers and students. It was further assured that the use of the questionnaires would serve to inform administrators as well as parents of the structure and operation of the Environmental Studies materials.

Summarization materials were in the form of (a) a general check list of ES activities used and (b) a check-list form to report individual teacher innovations. A teacher journal also served to record implementation.

In an attempt to accertain those factors which facilitated or which inhibited implementations a final MESA evaluation was completed by each participant.

## AN EVALUATION OF EVALUATION

Generally speaking instruments A, B, C, D, and E were judged to be satisfactory although in need of minor modification for computer processing. The student drawing as a substitute seems acceptable. The check-list forms and MESA final evaluation materials were quite helpful. However, the questionnaires unfortunately revealed poor communication within the school and parental community.

It appeared that identification of specific ES activities and, in fact, general school experiences are not communicated to parents—this may well be the normal behavior. Additionally, certain administrators appeared reluctant to communicate to parents via the parental questionnaire—the reasons for this reluctance would be pure speculation on the part of the writer.

As a result of this first year evaluation attempts, future study will be modified primarily by elimination of the questionmaires.



### DISSEMINATION

The dissemination of information regarding the MESA Project value in the following forms: 1) the mailing of two newsletters to all acheol superintendents of northeast Missouri, 2) distribution of the newsletters to all teachers in the school systems which were a part of the MISA Project, 3) placing of pictures with the news item in newspapers of the participants' local newspaper, 4) inner-classroom visitation between the MESA teachers and the non-participating teachers, and 5) staff communications as follows:

- a. 3 conference presentations were made outside of the state with the contact of 260 individuals
- b. 4 conference presentations were made by staff members within the state with the contact of 245 individuals
- c. the staff made presentations to 8 local teacher groups with an attendance of 304 individuals
- d. the staff made presentations to 7 community groups within northeast Missouri with an attendance of 430 individuals
- e. 12 student groups were contacted in northeast Missouri with a contact of 360 individuals

The effectiveness of the dissemination becomes most apparant from the following: 1) As staff worked with the teachers during the second summer it was quite noticeable that the attitude of these teachers toward Environmental Studies had progressed from the beginning attitude of the teachers during the first summer operations. During the second year's evaluation we should be able to detect through the pre-test of the different groups as to whether there is any significant difference. 2) A number of teachers and administrators from schools of northeast Missouri who were not participating in the MESA Project have inquired as to how they might become involved and be a part of next year's program.



# EVALUATION SUMMARY OF THE FIRST YEAR

This evaluation summary is of the first year of a three-year program which operated during the fiscal year July 1, 1972, through June 30, 1973.

### OBJECTIVE 1

By the end of the two four-week intensive training sessions during July and August of 1972 and an academic year (1972-73) inservice training program, 60 teachers from the 21 participating districts will be using Environmental Studies (ES) materials through their teaching and developing additional materials and assignments based upon the philosophy of the Environmental Studies program.

# Evaluation Summary of Objective 1

It was expected that the acceptable level of performance for teachers for the first year would be one Environmental Studies assignment per week. The average for the 62 participants was 27.8 instead of the anticipated 36 assignments during the year.

It was expected that each of the teachers would develop Environmental Studies assignments which were similar to but not exact duplicates of the original Environmental Studies assignments. The acceptable level of attainment during the first year was expected to be one every two weeks or 18 assignments. Instead the average per participant was 34.1 which exceeded the anticipated average.

Objective I was very well satisfied since the teachers progressed more rapidly to the self-designed Environmental Studies assignments than was anticipated. See Appendix Figure 1 for the details of the number of assignments which were achieved by each of the teachers. A tabulation of the topics was not received, however, in many cases this is available in journals which are kept by participating teachers.



## OBJECTIVE 2

The teacher's role in relation to the classroom and the students will be changed for 60 elementary teachers at the end of the first summer session and the academic year of 1972-73. By the end of the specified period the teacher and student will have joined in a partner-ship in learning through investigation of the environment. The teacher will tend to move to more of an open classroom operation procedure and to a class which recognizes that a student may play a more important role in the teaching situation.

# Evaluation Summary of Objective 2

This evaluation is under the guidance of the consultants of the Environmental Studies Project at Boulder, Colorado. A copy of this evaluation report is attached in the appendix. The report was prepared by Robert E. Lepper, Ph.D., Environmental Studies Project, Boulder, Colorado.

Classroom Practices Inventory. It was expected that there would be a significant change in the results of this inventory to the extent that the teacher would be moved to at least one position to the right. In the evaluation tests using the Classroom Practices Inventory, the pre-test showed an average response on the scale of 1 to 5 as 2.2; the post-test average response on the scale of 1 to 5 was 3.5. Therefore, the average response was moved to the right to the extent of 1.3 from the pre-test to the post-test indicating that there was a change in the classroom practices.

The Seating Chart Inventory was used to indicate whether or not the use of Environmental Studies materials would affect the physical dimensions of the classrooms of the project teachers. It follows if



the ES materials do foster more open, flexible classroom materials then seating arrangements 1 and 7 would be more frequently used as the year progressed.

Question No. 1, "Which classroom seating arrangement would you be most comfortable in?" showed the greatest change from the pre- to post-test to items 1 and 7 indicating a more open type of a classroom.

Question No. 2, "Which classroom seating arrangement would your students be most comfortable in?" showed the greatest change in response to items 1 through 7.

Question No. 3, "Which classroom arrangement do you think your principal would prefer?" showed the greatest decrease in response to items 3 and 4 and the greatest increase from the pre- to the post-test to items 1 and 7.

Question No. 4, "In which setting do you think the students would learn the most?" showed the greatest decrease to item 3 and the greatest increase from the pre- to the post-test in items 1, 2, and 7.

Question No. 5, "In which setting would you feel the least comfortable?" the response between the pre- and the post-test was approximately the same with a slight increase to item 6.

Question No. 6, "Which setting is closest to your present classroom seating arrangement?" showed a response which indicated an appreciable change in the physical arrangement of the classroom from item 3, which is the classical teacher in front of the students in rows of seats, to the response of item 1 and 7, which is a clustered arrangement or where the teacher is in the center of binary units of students.

Question No. 7 responses also indicated a movement away from the classical row type of seating arrangements to the more open arrangements of items 1 and 7. However, there is also a change in items 2 and



4 which indicate the teacher being a part of the circular arrangement or the center of a "U" arrangement of students.

The Seating Chart Inventory did indicate movement away from the more traditional classroom seating organization to the more open classroom organization of items 1 and 7.

Classroom Assessment Chart. This instrument should determine how much of a contribution students and teachers made to the "How, what, where, and when" of what they studied at the first year in comparison to the end of the year. If the ES materials do develop more open practices in the classroom where more responsibility is on the students and the focus of control of the classroom decisions is on the students, there should be a shift as indicated in the instrument. The results were recorded as percentages of time the classroom was operating as described in the four quadrants of the chart.

The description of the four quadrants from the pre- to the post-test is a greater increase to the upper quadrants—the upper left showing more active students and passive teacher and the upper right showing active teacher and active students.

The results of the Classroom Assessment Chart are a part of the evaluation report as submitted by the Environmental Studies Project,
Boulder, Colorado. Part 3 of Objective 2 was achieved as indicated by the Classroom Assessment Chart. Two evaluation procedures listed for Objective 1 are also attributed to the evaluation of Objective 2. They, too, indicated that through the use of Environmental Studies assignments and of Environmental Studies type of assignments that the materials were used and successfully.



### OBJECTIVE 3

By the end of the academic year 1972-73 approximately 1800 students will have learned to use the total environment as resource material for their education. Their total environment assumes to be the environment ranging from the student's immediate personal surroundings to the extensive physical, biological, and sociological medium in which he exists. For this objective, however, concentration will be placed upon the teacher-learning environment of the school.

# Evaluation of Objective 3

The two tests which were utilized to test this objective were

- 1. The About Me Test. This is a self concept test developed by James Parker of Georgia Southern College. There were about ten such instruments that the ES staff seriously considered using. This test was received by students as the pre-test trial of the instrument. This instrument was administered to the student.
- 2. The Positive-Negative Adjective List. This test calls for self-description as a means of measuring. The device was completed by both the students and the teacher.

## Evaluation Summary of Objective 3

The About Me Test is a 30 item test with a scale of 1 to 5 for each question. Number 1 represents the most positive and Number 5 represents the least positive feeling about oneself. On the pre-test the average score was 62.2; on the post-test the average was 55.3. The results of this test then indicate the movement of the responses toward the lower numbered side of the scale which indicated that the students had a more positive feeling about themselves.

The Positive-Negative Adjective List is an instrument to get the measure of self-concept and self-esteem. The results measured in the range of the number of positive and negative adjectives as noted by



the students on the test. The pre-test showed the student's positive adjectives as 1.8 to 1 negative adjective. In the post-test the response was 2.5 to 1. This test also indicated that the students had a more positive attitude of themselves.

NATIONAL EVALUATION SUMMARY
(ES Newsletter, Spring/Summer 1973)

During the past school year ES conducted a study to evaluate how well ES Packets 1 through 4 were accomplishing their intended goals—to increase student decision-making in the classroom, to improve students' self-concepts, and to develop greater awareness in students of the workings of their immediate environments. Twenty-two ES teachers in three test centers participated in the study, as well as 13 teachers picked by participants in the study to act as controls. The grade levels represented by the participating teachers ranged from upper elementary to lower senior high, with a concentration of teachers at the seventh and eighth grade levels. Five instruments were used. (These five instruments are the same as the ones used to evaluate the MESA Project.)

The national evaluation summary would indicate four conclusions:

- 1. Students using ES materials learned more content material pertaining to their environment than did the control students.
- 2. Use of ES materials fostered environments in which both teachers and students made more of their own decisions, instead of following plans developed by others.
- 3. ES materials fostered the development of a more realistic self-image or self-concept (indicated by the greater range of results on the "About Me Test" at the end of the year).
- 4. Students in ES classes developed a more positive self-image or self-concept of themselves than those in classes in which ES was not used (indicated by the results of the positive/negative adjective check lists).



# SUMMARY CONCLUSIONS OF THE EVALUATION

A summarization of the national evaluation of the ES project is stated on the foregoing page. The evaluator of the national project makes the following conclusions in relating the MESA Project to the nationwide project. These statements are as follow.

During the past two years, the ES project has been carrying out an evaluation project very similar to the evaluation project of the MESA Project. From this work I think two things can be helpful. First is essentially corroboration of the findings cited herein. For the only differences in the results of the national evaluation is that the results are more pronounced in the MESA Project data. That is to say-their results are more outstanding than the ES results are in general. This I would attribute to the project staff and the intensive summer training programs for the project teachers, plus the follow-up throughout the year. In addition to the sort of evaluation reported here for the MESA Project, the ES evaluation project included a look at the content that the ES students dealt with as a result of being in classes where ES material was used. The question, in part, that was being looked at was "If the affective is served will the cognitive follow?" In comparing ES students with control students on content analysis the answer to the above is YES. For the ES students did have a wider awareness and depth of content knowledge of their environment.

The evaluation of the MESA Project was undertaken to determine whether the project met certain goals. These goals included changes in teacher behavior and student self-concepts. The data reported here gives rise to the conclusion that those goals were attained. The members of the Environmental Studies staff that have worked with the MESA Project have



all developed the same personal evaluation of the project. It is that they are doing an outstanding job at not only accomplishing what they said they would but also in building a team, including all the teachers and associated administrators, that is functioning at a very high level in taking very hard and productive looks at the school systems they serve. As ES staff we have worked with a large number of school projects across the country during the last three years, and we believe this has given us a certain perspective to evaluate projects on. The MESA Project, from our vantage point, is certainly one of the outstanding ones in the country.



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# APPENDIX I

Compilations of Inservice ES Activities of the Participating Teachers



Month	Total E. S. Assignments	Average per Participant*	Range of No. of Assignments	Total R. S. Type Assignments	Average per Participant*	No. of Assignments
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# APPENDIX II

The Evaluation Report
of the MESA Project
as submitted by
Robert E. Lepper, Ph.D.
Environmental Studies Project
Boulder, Colorado

(This includes copies of the evaluation instruments used in the MESA Project.)

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## Evaluation Peport

The following material is a report on the outcome of the evaluation program of the MESA project in Northeast Missouri. This project was designed to facilitate the teachers in the project developing and incorporating Environmental Studies in their individual classes. The intent of the evaluation was in part to determine what effect the implementation of the ES materials would have on the teachers involved and on the students involved in the project. The instruments and approaches that were used are best understood by first looking at the assumptions that undergird the ES materials. They follow:

- Every student is a reservoir of relevant experience. He is an authority about what he has experienced and observed. Allowing him both intrinsic and extrinsic rewards for drawing upon his own experience is a vital step in helping him establish a nositive self-image.
- 2. The student can make decisions about what happens to him, not only among alternatives supplied by others, but among alternatives he personally created. When deciding between alternatives created by the curriculum, his posture is reduced to responding to extrinsic objectives.
- 3. The student has a strong sense of relevance. Determination of relevance is a personal decision that must be made by the individual. Teachers and curriculum-makers cannot make students, especially in the inter-city, accept extrinsic notions of what is relevant.
- 4. Nothing is more important for the student than to sense and know himself. Many recent studies show that students who know themselves do better than students who do not. The most important thing that each of us can accomplish in school is to develop a realistic set of aspirations and to progress toward his own goals at a rate appropriate to his capacities.
- 5. If an atmosphere of trust and confidence, detailed by the above assumptions, can be created, the student will learn far more capably than we would possibly predict.

The design is a simple pre and post assessment on several instruments. It should be noted that no attempt was made nor intended to be made to compare teachers with other teachers within or without of the project. Pather the bias was toward looking for growth in the project teachers toward a more open-flexible approach to teaching and in the effects the ES materials and faitheds had on students self-concept and self-esteem.



It also should be noted that the results of all different grade levels are lumped together. This is done for two reasons. First of all the assumptions undergirding the ES materials are not grade specific. They apply at all levels. And secondly there is no necessity to factor out by grade because the results would remain the same.

This report will present a brief description of each instrument used, followed by the data pertaining to that instrument and then a discussion of the results will be offered. Additional comments will be made that come from the national evaluation project that was carried out by the author. The following section is subdivided into teacher assessment instruments and student assessment instruments. All instruments are in appendix 1 of this report.

## Teacher Assessment Instruments

# A. Classroom Practices Inventory

This inventory is composed of 35 statements pertaining to practices that go on in a classroom. They were developed by the author to get a measure on the degree of flexibility and openness operating at a given time in the classroom. The teachers were asked to respond to these statements in two ways: First, what they are currently practicing and second, what they would like to do. Since most of the statements are descriptions of flexible-open teaching practices, this instrument was used to get at two things. Did the level of agreement between what teachers were doing and what they would like to do increase during the school year and did the teachers move in the direction of more flexible classroom practices.

Results: Classroom Practices Inventory



Pre-Test (N=38)\*

% Agreement between

doing and would like

to do; 73%

Post-Test (N=15)

7 Agreement between doing and would

like to do: 91%

\* The (N's) vary because of random sampling techniques used.

The direction of movement of the project teachers on the Classroom Practices Inventory was determined by comparing the relative positions on a scale of 1 to 5 with 5 representing the more flexible practices and of the continum. The data compared are the pre and post test data in response to the question "What you are now doing with respect to the 5 statements.

Results:

Pre-Test

Average response to 55 statements on scale of 1 to 5

2,2

Post-test

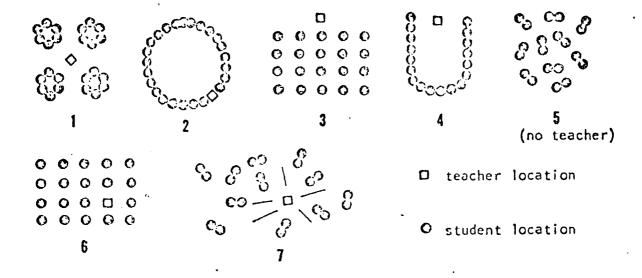
Average response to 35 statements on scale of 1 to 5

3,5

B. Seating Chart Inventory

The seating chart inventory was used to get a fix on whether the use of the ES materials would effect the physical dimensions in the classrooms of the project teachers. It follows that if the ES materials do foster more open-flexible classroom materials then scating arrangements 1, 7 would be used more frequently as the year progressed.





Associated with the diagrams were seven questions pertaining to the seating arrangements. The seven questions will be listed below and following each question the pre and post test results are given. The results are in percentages of responses for each choice. The N for pre-test is 38 and the N for the post-test is 16.

l. Which classroom seating arrangement would you be most comfortable in?

Pre 1-14 2-19 3-24 4-28 5-5 6-3 7--1

2. Which classroom seating arrangement would your students be most comfortable in?

Pre 1-24 2-16 3-6 4-12 5-27 6-1 7-14

Post 1-30 2-3 3-6 48 5-25 6-0 7-28

3. Which classroom seating arrangement do you think your principal would prefer?

Pre 1-8 2-12 3-50 4-30 5-0 6-0 7-0
Post 1-20 2-16 3-18 4-18 5-0 6-0 7-19



4. In which setting do you think the students would learn the most?

Pre 1-6 2-6 3-48 494 5-6 6-0 7-10

Post 1-20 2-22 3-8 4-16 5-12 6-0 7-22

5. In which setting would you feel the least comfortable?

Pre 1-5 2-0 3-4 4-0 5-5 6-75 7-11

Post 1-2 ?-1 3-3 4-0 5-8 6-80 7-6

6. Which setting is closest to your present classroom seating arrangement?

Pre 1-4 2-15 3-60 4-15 5-0 6-1 7-7

Post 1-34 2-12 3-7 4-19 5-0 6-0 728

7. Indicate what % of an average month your classes spend in each of the classroom seating arrangements shown (it should add up to 190%)

Pre 1-20 2-5 3-60 4-10 5-0 6-0 7-5 Post 1-34 2-14 3-8 4-20 5-0 6-0 7-24

### C. Classroom Assessment Charts

The instrument was used in a pre and post test assessment to determine how much of a contribution students and teachers made to the how, what, where and when of what they studied at the first of the year in comparison to the end of the year. If the ES materials do develop more "open" practices in the classrooms where more responsibility is given the students then the focus of control of classroom decisions should shift as indicated in this instrument.

Results: Classroom Assessment Charts

The results are reported as percentages of time the classroom was operating as described in the four quadrants of the chart. The descriptions of the four quadrants



Upper Left Quadrant

Active students Passive Teacher

Students
are active contributors
to decisions
regarding the content
and process of learning.
Teachers
have a
"Hands-Off" posture.

Whper Right Ouadrant

Active Teachers Active Students

Teachers and students are active contributors to decisions regarding the content and process of learning

Lower Left Quadrant

Passive Students Passive Teachers

Students and Teachers are directed • in their activities by district policies learning manuals, etc. Lover Right Quadrant

Active Teacher Passive Students

Decisions regarding content and process of learning are made by the teacher. Students are receivers not constructors of content and process.

Pre-Tes	it .	
10%	46%	
14%	30%	

Post-1	ľest	65%
Spanning to a principal or a particular or a p		المراجعة ا
Q.X		10%

Student Assessment Measures:

# D. About Me Test

This instrument was developed by James Parker of the University of Georgia.

It purposets to measure how a student feels about himself in school. This instrument was selected after screening some dozen instruments in a pre-use trial. It is a 30 item test with a scale of 1 to 5 for each question, where 1 represents the most positive and 5 represents the least positive feelings about ones self. The scoring was done by simply adding up the acords with 30 being the minimum Ricthe most positive feelings) and 150 the maximum (the most negative feelings).

Results:

Pre-Test

Post-Test

(N=38 classes)

(N= 18 classes)

Average Score

Average

62.2

55.3

Range of Scores

Range of Scores

44-79

34-68

# E. Positive-Negative Adjective Check List

This instrument is another attempt to get a measure of self-concept and self-esteem. The directions to the classes were: Make a list of all of the positive adjectives that you can think of that describe you. After that task was completed the directions were repeated using negative adjectives. The scoring consists of counting the positive and negative adjectives for each student and reporting them in terms of the range in the number of each and the ratio of the number of positive adjectives to negative adjectives.

# Results:

Range in the No. of Positive and Megative Adjectives

Positive Adjectives

Negative Adjectives

Pre-test (N= 38 classes)

Pre-test

4-13

2∽6

Post-Test (N=16 Classes)

Post-test

2-14

3-5



Ratio of the Number of Positive Adjectives to the number of negative adjectives

Pre-test (N=38 classes)

Post-test (N=16 classes)

+ Adj./Neg. Adj.

+Adj./Neg. Adj.

1.8 to 1

2.5 to 1

# Discussion:

First some comments on the data preparation and reporting. An attempt has been made to make the data easily assimilated by the reader so that any conclusions drawn here can be checked out by the reader. Secondly no statistical tests were performed on the data. The only data manipulations have been in averaging, taking percentages and doing some ratios. No further clarity would be found—and indeed probably less—in this report if statistical significance were established for all the differences herein reported. The changes in the data from pre to post testing are clearly plain to see and nothing else is felt to be needed.

The results of each test will be briefly discussed and then some summary conclusions offered.

Classroom Practices Inventory:

An assumption that must be made in interpreting any measure of this sort is that the respondents to the measure responded honestly. In this case there is no reason to doubt this assumption and lots of reasons to support it. The latter reasons come from the interactions of the MESA project staff and the project teachers. In my personal visits to the project I observed an obviously well-developed rapport and level of acceptance on both the staff and the teacher's parts. I am making this assessment here but it applies to the whole of the evaluation project as well as to the project at large,

From the classroom practices inventory two conclusions follow. They are that the teachers in the project did grow towards more flexible—open classroom practices during the school year and that the teachers were allowing themselves to do more of what they "wanted" to do by the end of the year than they did at the first. In analyzing the how comes of these results two things stand out clearly to this person. First of all the ES materials are designed to allow teachers as well as students to find out that they are more competent than they might otherwise think. And secondly—in observing the operation of the project in general the most outstanding attribute of the program was the operating ethics of acceptance and cooperation. In essence, the project staff helped immensely in establishing an environment within which the project teachers could find out what these new curricular materials and methods meant to them, thereby increasing their own confidence.

# Seating Chart Inventory

It was predicted that by using the ES materials the physical characteristics of the classroom would be effected. It was further predicted that a higher percentage of time would
be spent in the more flexible classroom arrangements as the year went by. Both of these
predictions are supported by the results.

It may be that these particular results were effected not only by the use of the ES materials and the involvement of the project staff but also by this assessment instrument itself. For it is little doubted that when the teachers saw the instrument for the first time the 7 possible seating arrangements were called to their attention. Powever, regardless of a single or multiple causation it is apparent from the data that the teachers moved in the direction of more flexible use of their physical facilities.

Much more could be said about those results. For instance there was a large change in the teacher's perception of what their principals senting choices would be from the beginning to the end of the year. A large change is also need on the question of "In which ERIC ng arrangement would the student". Learn the most?" It would appear that this

change represents putting more responsibility on the students for their learning.

This of course is one of the goals of the ES materials.

# Classroom Assessment Chart

Part of the more open-flexible classroom involves the students being more highly involved in the questions of how, what, where, and when of their own studies. The notion of course is that if the students are part of those decisions then the students will in fact apply themselves more to the how, what, when, and where of their education. Therefore, the classroom assessment chart was used to determine where the focus of control of the decisions in the classroom rested. The data support that at the end of the year the students in the project a lot more say in what went on in the classroom. Certainly one of the attributes of the ES materials is that most all of the assignments are ambigious, which means that the students were forced into making Jacisions and when a teacher sees students making good decisions they get convinced that students are more capable at making decisions and allow them to do some more of the time. In the case of the MESA project teachers this is what appears to have taken place. Along with, of course, the MESA projects staff input and encouragement.

About Me Test—One of the basic assumptions underlying much of the philosophy of the ES materials is that if the affective is served then the cognitive will take care of itself. Some data will be presented as for the efficiency of this assumption later. Certain one of the prime goals of any educational project is to positively effect the students self-concept or self-esteet. And in this respect the data from the About Me Test supports very strongly that the students self-concept was positively effected during the school year. One could easily argue that the MESA project and the LS materials had nothing to do with this change by suggesting that the observed change would have taken place anyway. However, to do so would be flying in the face of an ever enlarging body of information that suggests that the opposite vs. true. That is that poing to school is detrimental to RCs self-concept not positive to it. Therefore, it appears prasonable to attribute this

positive change to the MESA project work.

And to further speculate, I would hazzard a hard guess that by being around children whose self-concept in school is improving that the teachers self-concept also would improve. This speculation is of course supported (from my frame of reference) by the results of all of the measures taken on the teachers. For if you aren't feeling better about yourself it is very difficult to loosen the control over your environment which of course is what the data supports the teachers did.

## Positive-Negative-Adjective Check List

The results of the positive-negative adjective lists corroborates the results of the About Me Test. Both results going in the same direction—that is towards a more positive feeling about self. This is particularly important since the About Me Test is an instrument that constrains and limits the respondee to a high degree by both its format and structure while the adjective lists are much more like free responses manipulated little by formal input or format.

## The National Evaluation Program

During the past 2 years, the ES project has been carrying out an evaluation project very similar to the evaluation project of the MESA project. From this work I think two things can be helpful. First is assentially corroboration of the findings cited herein. For the only differences in the results of the national evaluation is that the results are more pronounced in the MESA Project data. That is to say—their results are more outstanding than the ES results are in general. This I would attribute to the project staff and the intensive summer training programs for the project teachers, plus the follow-up throughout the year. In addition to the sort of evaluation reported here for the MESA project the ES evaluation project included a look at the

ont that the ES students delt with as a result of being in classes where ES material was

used. The question, in part, that was being looked at was "If the affective is served will the cognitive follow?" In comparing ES students with control students on content analysis the answer to the above is YES. For the ES students did have a wider awareness and depth of content knowledge of their environment.

## Summary Conclusions

The evaluation of the MESA Project was undertaken to determine whether the project met certain goals. These goals included changes in teacher behavior and student self—concepts. The data reported here gives rise to the conclusion that those goals were attained. The members of the Environmental Studies staff that have worked with the MESA Project have all developed the same personal evaluation of the project. It is that they are doing an outstanding job at not only accomplishing what they said they would but also in building a team, including all the teachers and associated administrators, that is functioning at a very high level in taking very hard and productive looks at the school systems they serve. AS ES staff we have worked with a large number of school projects across the country during the last 3 years and we believe this has given us a certain perspective to evaluate projects on. The MESA Project, from our vantage point, is certainly one of the outstanding ones in the country.



APPENDIX I



The following statements are about some ways of operating a classroom. Please respond to each statement under two categories:

- A. What you are now doing.
- B. What you would like to do.

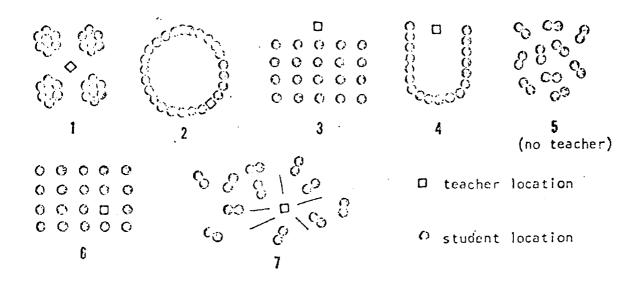
Car	a statement direct two caterories.										
	REACH STATEMENT ROLE THE 2 MOST APPROPRIATE DOTS	Never	ZSeldom	≥Someti o	Dorten	calways	Never	LSeldom	Someti	Often	Always
1.	Each student can decide for himself whether or not to take part in a particular assignment.			mes •	•	•	•		Acs.	•	•
2.	Each student is allowed to decide how he will study each topic.	•	•	•	•	•	•	•	•	•	•
3.	Each student determines how much time he spends on a topic.	•	•	•	•	•	•	•	•	•	•
4.	Students are free to group as they want.	•		•	•	•	•	•	•	•	•
5.	Every student has free access to all the materials in the classroom.	•	•	•	•	•	•	•	•	•	•
6.	Students determine what is removed or added to the classroom.	•	•	•	•	•	•	•	•	•	•
7.	Every student is completely free to move in the classroom.	• .	•	•	•	•	•	•	•	•	•
8.	Students freely ask for help whenever they need it.	•	•	•	•	•	•	•	•	•	•
9.	Students are graded on a curve.	•			•	•	•	•		•	•
10.	Students have the responsibility to evaluate themselves.	•	•	•	•	•	•	. •			•
11.	Students self-initiate their own activities whenever they choose.	•	•	•	•	•	. •	•	•	•	•
12.	Each student has his own personal space in the classroom (drawers, cupboards, etc.).	•	•	•	•	•	•	•	•	•	•
13.	Peer-group teaching is a primary activity in the classroom.		•	•	٠.	•	•	•	•	•	•
14.	Many diverse activities simultaneously go on in the classroom.	•		•	•	•	•	•	•	•	•
15.	Students are encouraged to report on topics in any way they want.	•		•	•	•		•	•	•	•
16.	Do you have contracts with the students about their learning?	•	•	•		•	•	•	•	•	•
17.	I am confident my students will John if left to themselves.		•	•	•	•	•		•	•	•



EOR	EACH STATEMENT							42			
	LE THE 2 MOST APPROPRIATE DOTS	Never	2Seldom	Sometime	50ften	Always	Never	LiSeldom	<sup>H</sup> Sometime	Often	Always
18.	I leave my students alone in the classroom.	•	•	. 5	•	• .	•	•	. 8	•	•
19.	I lower student grades when they make mistakes.	•	•	•	•	•	•	•	•	•	•
20.	Do I follow a school outline, a manual, or a text in pursuing course content?	•	•	•	•	•	•	•	•	•	•
21.	Students have fixed places to sit.	•	•	•	•	•	•	•	•	•	•
22.	My class is child-centered rather than subject centered.	•	•	•	•	•	•	•	•	•	•
23.	Students can leave the classroom whenever they want to.	•	•	•	•	•	•	•	•	•	•
24.	Students are free to bring anything they want into the classroom.	•	•	•	•	•	•	•		•	•
25.	Students are encouraged to consult other teachers as resource people.	•	•	•	•	•	•	•	•	•	•
26.	I encourage teachers, parents, and administrators to come into the classroom as resource people and observers.	•	•	•	•	•	•	•	•	•	•
27.	The operational rules of the classroom are made by students.	•	•	•	•	•	•	•	•	•	•
28.	Students are free to do nothing.	•	•	•	•	•	•	•	•	•	•
29.	Individual novel solutions are rewarded more than concensus solutions.	•	•	• .	•	• .	•	•	•	•	•
30.	Students are encouraged to develop personal goals.	•	•	•	•	•	•	•	•	•	•
31.	I talk individually with students about their personal goals and then pursue their development.	•	•		•	•		•			•
32.	Students are free to talk to each other at any time.	•	•	•	•	•		•	•	•	•
33.	Individuals are encouraged to pursue their own interests.	•	•	•	•	•	•	•	•	•	•
34.	I like to go to school in the morning.	•	•	•	•	•	•	•	•	•	•
35.	Students consider their total community , as a primary resource.	•	•	•	•	•	•	•	•	•	•

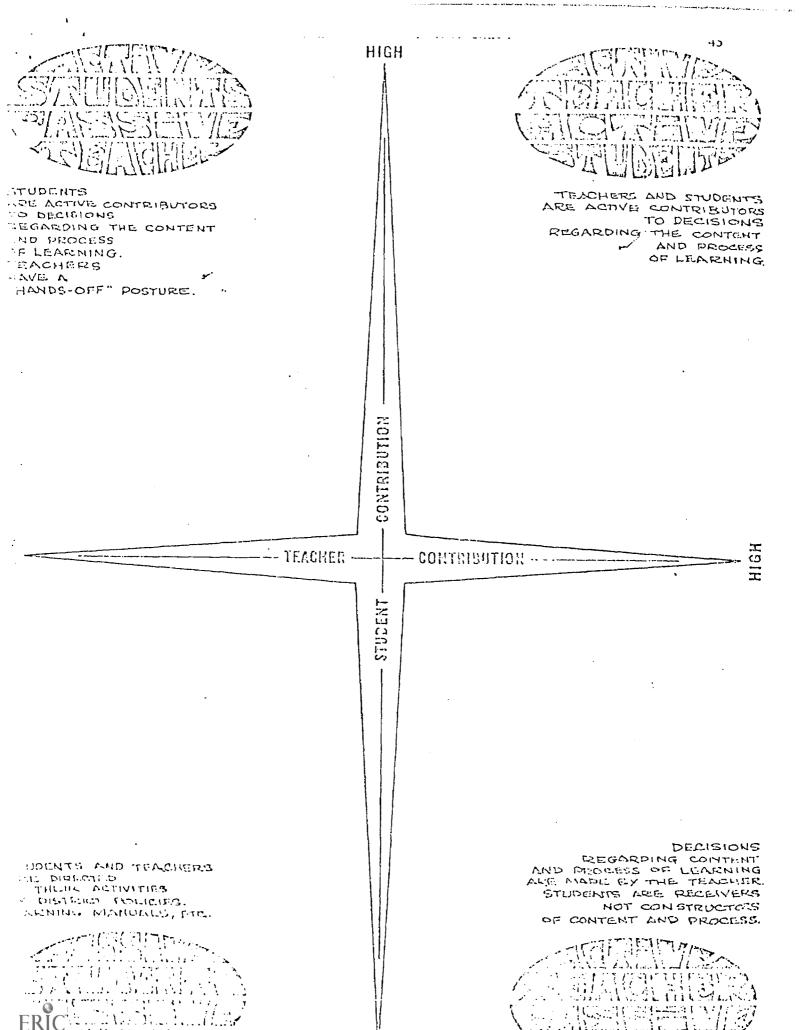


These questions concern the diagram of classroom seating arrangements shown below. For each question, place a mark in front of the seating arrangement number which best describes your answer to the question.



- 1. Which classroom seating arrangement would you be most comfortable in? 1 2 3 4 5 6 7 Which classroom seating arrangement would your students be most comfortable in? 1\_\_\_ 2\_\_ 3\_\_ 4\_\_ 5\_\_ 6\_\_ 7\_\_\_
- 3. Which classroom seating arrangement do you think your principal would prefer?
  - 1 2 3 4 5 6 7
- In which setting do you think the students would learn the most? 1\_\_\_ 2\_\_ 3\_\_ 4\_\_ 5\_\_ 6\_\_ 7\_\_\_
- In which setting would you feel the least comfortable? 1\_\_\_ 2\_\_\_ 3\_\_\_ 4\_\_\_ 5\_\_\_ 6\_\_\_ 7\_\_\_
- Which setting is closest to your present classroom seating arrangement? 1 2 3 4 5 6 7
- Indicate what % of an average month your classes spend in each of the classroom seating arrangements shown (It should add up to 100%.) 1\_\_\_\_ 2\_\_\_ 3\_\_\_ 4\_\_\_ 5\_\_\_ 6\_\_\_ 7\_\_\_\_





-11/2

48

me	<del></del>	Date	
e		Teacher	<del></del>
	School		
	ABOUT ME		

How a person feels about himself in school seems to be important to how he does in school. Here is a way for you to show how you feel about yourself in school. All you have to do is to rate yourself on the thirty items below. You are to choose the one position that best shows how you feel about yourself on each line and make a heavy pencil mark there, like this (1). Do not mark more than one place on any one line. If you change your mind you may erase and mark another choice. There are no right or wrong answers, and your paper will probably be different from anyone clse's. It is best to make up your mind quickly so don't spend too much time on any item. There is no time limit but most of you should finish in fifteen minutes or less. This practice item will help you understand the job.

•

I'm friendly.

-- (.) () () () ()

If you think you are a friendly person you should blacken in the space to the far left, but if you think you are not so friendly you would place your mark to the far right. Of course you may mark any of the other spaces if it gives a better idea of how you feel about yourself as a friendly person.

Scale Developed By James Parker



•

11	I'm good in school we	ork	I'm not good in school work				
	1 2	3	4	5			
2B	Mostly I have good io	deas	My ideas a	are poor			
	1 2	3	4	5			
3C	I'm a worthwhile pers	son	I'm not a worthwhile	person			
	1 2	3	4	5 .			
4D	I'm pretty strong		I'm not too	strong			
	1 2	. 3	4	5			
5E	Most people trust me		Most people don't	trust me			
	1 2	3	4	5			
6A	Teachers like me pre	tty well	Teachers don't like me	too much			
	1 2	3	. 4	5			
7B	I can do most things well I do very few things						
	1 2	3	4	5			
8C	I'm a happy person		I'm an unhapp	y person			
	1 2	3	4	5			
9D	I'm healthy		I'm not too	healthy			
	1 2	3	. 4	5			
10E	I'm popular		I'm not too	popular			
	1 2	3	4	5			
111	I'm a good reader		I'm not a good	reader			
	1. 2	3	4	5			
128	l'm a hard worker		I'm not a hard	worker			
-	1 2	3	4	5			



;

13C	I'm not shy			I'm very shy				
	1 2		3	4		5_		
14D	I don't get t	ired quickly		Ιg	et tired qui	ckly		
	1 2		3	4		5		
15E	Other people interesting			I'm not too	interesting	to others		
	1 2	2	3	4		5		
16A	I work well w	ith others in		I don't work in school	well with o	thers		
	1 2		3	4		5		
17B	I'm pretty br	rave		:	I'm not too	brave		
	1 2	?	3	4		5		
18C	I'm pretty sm	lart			I'm not very	smart		
	1 2	?	3	4		5		
<b>1</b> 9D	I'm tall enou	ıgh		I'm not tall enough				
•	1 2	?	3	4	<del></del>	5		
20E	Most people a	are fair with we		Most people	are unfair	with me		
	1 2	2	3	4	<del></del>	5		
21V	I do well in	class discussion		I don't discussi	do so well i. on	n class		
<u> </u>	1 . 2	2	3	4		5		
22B	I handle most	of my problems we	1.1.	I can very	't handle my well	problems		
	1 2	2	3	4	*	5		
23C	I'm a helpful	l person			I'm not too	helpful		
	1 2	2	3	. 4		5		
					·			



24D	I'm good looking		I'm not too good	looking			
•	1 2	3	4	5			
25E	Most people are easy get along with	for me to	Most people are har get along with	d for me to			
	1 2	3	4	5			
26N	I'm mostly happy in s	chool	I'm mostly unh	appy in school			
	1 2	3	4	5			
27B	I can usually finish	what I start	I never finish most things				
	1 2	3	44	5			
28C	I'm proud of me		I'm not proud of me				
	1 2	3	4	5			
<b>2</b> 9D	I handle my body well and games	l in sports	I don't handle my sports and games	body well in			
	1 2	3	4	5			
30E	I'm often sorry for o	others	I'm not often so	erry for others			
+	1 2	3	. 4	5			



A11-2.2 Positive Adjective List Negative Adjective List