DOCUMENT RESUME

ED 083 803 EM 011 511

AUTHOR	Sarbaugh, L. E.; And Others
TITLE	A Study of the Diffusion of Ten Educational Products. An Evaluation of Communication and Subsequent Action With Respect to Educational Innovations in Ten Display Modules.
INSTITUTION	Michigan State Univ., East Lansing. Dept. of Communication.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
REPORT NO	NIE/HEW-1
PUB DATE	31 Jul 73
GRANT	OEG-0-71-3944
NOTE	157p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	*Adoption (Ideas); *Communication (Thought Transfer); *Diffusion; *Educational Innovation; Educational Research; Innovation; Program Evaluation; Teaching Methods
IDENTIFIERS	Display Modules

ABSTRACT

Research was undertaken to evaluate the degree to which a program of exhibiting display modules of new teaching methods influenced the adoption of those methods. The study examined: 1) the prior adoption level of display visitors, 2) the amount of attention paid to different aspects of the displays, 3) the reactions to displays, 4) the ability of the modules to persuade teachers and administrators to adopt innovations, 5) the effectiveness of combining consulting sessions with the display modules, and 6) the sources of information people use to learn about these new methods. Results indicated that the displays and consulting sessions definitely promoted increased awareness and adoption of educational innovations. (LB)

MICHIGAN STATE UNIVERSITY

Department of

COMMUNICATION

College of Communication Arts

A STUDY OF THE DIFFUSION OF TEN EDUCATIONAL PRODUCTS

L. E. Sarbaugh, Project Director

July 31, 1973

NIE/HEW - 1

A STUDY OF THE DIFFUSION OF TEN EDUCATIONAL PRODUCTS

An Evaluation of Communication and Subsequent Action With Respect to Educational Innovations in Ten Display Modules

L. E. Sarbaugh, Project Director
Department of Communication
Michigan State University
East Lansing, Michigan 48824

Assisted By:
Roger Williams, Thomas Nash, Sue Rose,
Brian Hawkins, Donald Miller, and Fritz Kramer
Graduate Assistants at Michigan State University

Work was Conducted Under Grant No. OEG - 0-71-3944
July 31, 1973
National Institute for Education
Department of Health, Education and Welfare
Washington D. C.

TABLE OF CONTENTS

Chapter I
(The Problem)

A. Background Information 1
B. Questions to be Answered 2
C. What Diffusion Studies Suggest 2

Chapter II
(Methodology)

A. The Initial Plan and its' Modifications 4
B. Data Collection 6
C. The Samples 7
D. Data Analysis 9
E. Survey of Awareness of Displays and Methods among Curriculum Coordinators 12

Chapter III
(Findings)

Introduction to Chapter 14
A. Adoption Levels by Site and Teaching Method 15
B. Comparing Levels of Adoption Behavior Before and After Visiting the Displays 17
C. Time Spent Viewing the Displays 22
D. Characteristics of the Respondents 24
E. Effect of On-Site Interviews 25
F. Relationships Between Adoption Level and Other Variables 26

1. Correlates of Adoption; Least Squares Delete Analysis 27
2. Attendance at Consulting Session 29
3. Innovativeness of the School System 31
4. Relationship Among Other Variables' Elementary Linkage Sets 32
5. Comparison of Characteristics of Respondents by Display Sites 34

G. Feedback From Consulting Sessions 35
H. Awareness of Methods and Display Among Two Samples of Curriculum Coordinators 36

Chapter IV
(Summary and Recommendations)

A. Summary 40
B. Recommendations 43
References 45

APPENDICES

Appendix A - Data Collection Instruments

Appendix B - Feedback From Consulting Sessions

Appendix C - Responses to Open-Ended Questions

Appendix D - Tabulation of Responses

(A listing of items in each Appendix is given at the beginning of each.)

TABLES

Table No.

1 Mean Adoption Scores Among Display Sites 15

2 Mean Adoption Scores by Topic at Three Points in Time 16

3 Number and Percentage of Respondents at Each Level of Adoption, Pre-Display and 2 - 3 Months After Visiting Displays 18

4 Number and Percentage of Respondents at Each Level of Adoption Prior to the Displays and Immediately After Viewing the Displays 19

5 Summary of Differences Between Pre-Display Adoption Scores and Adoption-Impact Scores 2 - 3 Months After Visiting the Displays 20

6 Mean Viewing in Seconds for Each of Three Panels in Each of Four Displays 22

7 Ratio of Mean Viewing Time to Required Viewing Time 23

8 Variables Which Correlated With "Delayed" Adoption-Impact Measure; Multiple, Partial, and Zero-Order Correlations 27

9 Comparison of Adoption Levels for Attendance vs. Non-Attendance at Consulting Sessions 29

10 Impact of Attending Consulting Session for Two Special Subsets of Respondents 30

11 Adoption Levels by Rank of School System on Innovativeness 31

12 Summary of Awareness of Displays and Methods Among Curriculum Coordinators Both Within, and Outside of Potential Area for Exposure to Displays 37

13 Information Sources Cited by Curriculum Coordinators for Learning About Displays and Teaching Methods 38

FOR MORE TABULAR DATA, SEE APPENDIX D

A STUDY OF THE IMPACT OF TEN EDUCATIONAL PRODUCTS DISPLAYS ON THE ADOPTION OF TEN NEW TEACHING METHODS

CHAPTER I

THE PROBLEM

A. Background Information

A goal of the National Center for Educational Communication in the Department of Health, Education, and Welfare, is to increase the adoption of new teaching methods in school systems in the U.S.A. One approach has been to build displays describing these methods and to exhibit the displays in various parts of the U.S.A.

The study reported here was conducted to provide some feedback on the level of adoption of ten new teaching methods and the impact of ten Display Modules in gaining acceptance of those methods. Each of the Display Modules covered one of the teaching methods. Since the truck used to transport the Display Modules held only eight of the Modules, no more than eight were usually shown at a given site.

Comments from viewers early in the use of the Displays indicated that it was helpful to have a specialist in each of the teaching methods available to discuss the method with those attending. It was arranged, when possible, to have a person meet in a room and conduct a one-hour presentation and discussion regarding a method which was his specialty. These specialists were either persons who had worked in the development of the teaching method or persons who had used the method rather extensively.

Local educational agencies or school systems requested the Displays for use in their area. The local sponsoring group handled the arrangements for facilities and promotion, assisted by the staff of Instructional Dynamics, Inc., of Chicago, Illinois. IDI handled the scheduling to facilitate serving as many areas of the U.S.A. as possible while striving to strike an optimum balance between maximizing circulation of the Displays and minimizing transportation costs.

IDI also arranged for handouts at the Display sites which would indicate where additional information could be secured; accumulated registration forms from all sites; and relayed to the agency developing a teching method, the requests forms for additional information completed by visitors to the Displays.

B. QUESTIONS TO BE ANSWERED

Answers were sought to several questions in connection with the efforts to increase teacher use of the methods covered by the displays and consulting sessions. Among these were the following:

1. What is the level of adoption of persons when they first come to the Display site?

2. How much attention will they give to the different parts of each of the Displays?

3. What are their reactions to the Displays and to the methods covered by the Displays?

4. What impact do the Displays have on the teachers and administrators viewing them? Will they be persuaded to try the new methods?

5. What action will those attending the Displays have taken two to three months after seeing the Displays?

6. What additional impact is obtained by having a consulting session in addition to viewing the Displays?

7. What sources of information do people use to learn about and decide about using these methods?

C. WHAT DIFFUSION STUDIES SUGGEST

Past research on diffusion of innovations (Rogers 1971; and others) suggests that mass media are a main source of messages which create awareness of new methods, but more face-to-face contacts are used in deciding about use or rejection of new methods. This would suggest that the Displays would serve a main function of creating awareness, but it would take more intense contacts, such as the consulting sessions, to move potential users to the decision and implementation stages. It also may take additional person-to-person contacts in succeeding weeks to get people to the final

stages of adoption.

Other studies point to sources external to one's own system for new inputs. This would suggest that sources of information outside a school system would be needed to bring about the introduction of new ideas. The Displays by NCEC would be one such source. Past work also points to increased probability of adoption by those persons who have a pattern of more contacts external to their own system (Rogers 1971; Waisanen 1969).

It is known that systems differ in their readiness to accept change. Those systems which value innovation will be expected to accept new methods more quickly, other things being equal.

Other factors such as organizational complexity, and level of participation in decision-making are being investigated in another study dealing with adoption of ten reading programs (Garbaugh, et al 1973). Those interested in a more extensive review of the literature pertaining to organizational factors related to decision-making may refer to that report. It also includes findings pertaining to the relationships between adoption levels and such sets of variables as innovation proneness, level of participation in decision-making, organizational complexity, level of external contact, and sources and types of messages regarding the programs being proposed for adoption.

CHAPTER II

Methodology

A. THE INITIAL PLAN AND ITS MODIFICATIONS

The dependent variable in this study was level of adoption at three points in time -- (1) respondents' reports of their adoption level prior to coming to the Displays; (3) their level of adoption after viewing the Displays; and (3) their level of adoption two to three months after visiting the Displays. A composite measure of adoption level was developed. This measure will be described under data collection.

The independent variables used in the basic design were Display site; Display topics selected for study; attendance or non-attendance at one of the consulting sessions; and whether or not the person was interviewed about the Display and method at the Display site; and sets of variables pertaining to frequency of external contacts, perceived innovativeness of one's own school system, viewing of the Displays, reaction to the Displays, and sources of messages regarding the methods.

A Greco-Latin Square design was planned with 16 treatment cells. These were four Display sites by four Display topics with each column and row of the matrix including the four combinations of attendance or non-attendance at a consulting session with interviewing or non-interviewing of sample members at the Display site. The diagram of the design appears below. C represents attendance at a consulting session and $\tilde{C}$ indicates non-attendance; the I represents on-site interviewing while $\tilde{I}$ indicates non-interviewing of sample members at the Display site.

TOPIC	SITE I	II	III	IV
A	C I	C I	C I	C I
B	C I	C I	C I	C I
C	C I	C I	C I	C I
D	C I	C I	C I	C I

This design would have allowed a comparison of adoption levels among the four sets of variables. Unfortunately two things made it impossible to follow the design. First, it was not judicious to dictate to an area hosting a Display that they could not have a consultant when they wanted one for a particular Display topic. Second, the plans for the Cambridge Display could not be carried out when it was discovered that the Display units were too large to get through the doors of the building in which the Display was scheduled to be held; and there was not time to select another site and still complete the required followup interviews.

As far as attendance at consulting sessions, there was a fortunate self-selection process oporating. When followup data were collected two to three months following a Display, it was found that about half (51.2%) of the on-site sample had attended a consulting session and the other half had not. These respondents were also nearly equally divided for each of the four Display topics selected for study.

As for the interviewing on-site, the modified plan was to randomly select two Display topics for interviewing of viewers and two of the four for no on-site interview at the first site. This was done. At subsequent sites, the interviewing and non-interviewing of viewers was alternated so as to balance as nearly as possible the number of sample members who were not interviewed for each of the Display topics. When one site "washed out," it prevented getting the balance of the interviewing and non-interviewing across all four topics. However, the total number of viewers in all the samples

divided about equally between those interviewed on-site and those not interviewed on-site. Tho numbers by topics and the totals are shown below:

DISPLAY TOPICS	No. Interviewed at Display Site	No. not interviewed at Display Site
Individually Guided Education (IGE)	44	19
Comprehensive School Math (CSM)	42	21
Minicourse on Effective Questioning (MEQ)	20	43
First-Year Communication Skills (FYCS)	21	37
	127	120

B. Data Collection

Three sets of data wore collected at the Display site and one set was collected two to three months following the Displays.

At the Display site, data were collected on viewing time and on prior awareness and action toward adoption of the methods for the four topics included in the study. Viewing time data were collected by observers using stopwatches to determine the amount of time a person would spend viewing the right, left, and center portions of each of the four Displays. As the person was leaving the Display, the observer would approach the person and obtain the data on adoption level. Those data were recorded on a single page, a sample of which is shown in Appendix A-1. For the "non-interview" samples, that was the extent of the data collected at the Display site. For those samples designated as "On-site interview" samples, the observer had an additional set of questions regarding the Displays (Appendix A-2).

At the consulting sessions conducted at or near the Display areas, a feedback form (Appendix A-4) was distributed to those attending selected sessions. They were asked to complete the form and return it to the member of the research team assigned to that session. Self-scoring answer sheets were provided to respondents to record thoir answers to

the questions.

Consultants cooperated in collecting the feedback data by suggesting that evaluation was helpful in teaching and they would appreciate it if those attending would complete the form to give the consultant some feedback on the session.

Two to three months following the visit to a Display site, telephone (WATS Line) interviews were conducted with both the interview and non-interview samples. In this interview, data were obtained regarding the amount of teaching and administrative experience of the sample member, the kinds of contacts used to obtain information about teaching programs, and the action taken pertaining to adoption of the method subsequent to visiting the Display. The specific questions are shown in Appendix A-3.

Observer-interviewers were obtained from colleges near the Display sites and teams of two to four were assigned to each of the Displays being studied. They were given practice in observing and interviewing one another before the Display opened on the first day of the data collection at each site. Two persons would be assigned to those Displays on which time and adoption level data were collected; four were assigned to those on which interview data were collected in addition to the time of viewing and adoption level data.

C. The Samples

The population for this study was the school teachers and administrators visiting the Display sites at which data were collected. Sites were selected to get both urban and more rural areas. The three sites were Methuen, Massachusetts; Boise, Idaho; and Hamilton, Montana. These were sites which were still available for study after approval for the data collection was received from the Agency in HEW. Some limited feedback data were also obtained from the consulting sessions which were held at Cambridge, Massachusetts, even though the Displays were not available.

Four topics were randomly selected from among the eight most often requested. These were: Individually Guided Education in Multi-Unit Schools (IGE); Comprehensive School Math (CSM); Minicourse on Effective Questioning (MEQ): and First-Year Communication Skills (FYCS). These were requested by all the sites included in the study.

The plan for data collection was to pick random times during the day then take the people stopping to view the Display in sequence during those random selected time periods. Interviewers were to complete the timing and other data collection with one person, then start with the next person stopping to view the Display. However, the flow of traffic was such that the data collection was continuous throughout the days on which data were collected.

The plan called for collecting data from 30 persons for each topic at each site. That goal was not achieved. Data were obtained from 19 to 24 persons per topic per site, except for the FYCS topic at Boise where only 15 completed schedules were obtained.

For feedback data from consulting sessions, intact groups were taken, and where the schedule permitted, two groups on the same topic were used. The number of completed forms varied as will be seen in the tabulations recorded in Appendix B.

The potential respondents on the followup data collection were all those from whom viewing and adoption data had been collected at the Display sites. Their addresses and telephone numbers were obtained during the contacts at the Display and they were told that they would be contacted later to see what additional thinking they had done about the methods covered in the Displays.

About 1/7 (14.6%) of the potential respondents on the followup could not be contacted. It appeared that several of these were student teachers at the time of Displays, and forwarding addresses or current telephone

numbers were not available to locate them at the time of the followup data collection. Among those for whom followup data were not obtained were five who chose not to participate in this phase of the data collection; two of these were due to deaths in the family.

The total completed data sets by consulting and interviewing across the four topics and the three sites are:

	No.
Attended Consulting Session	
a. Interviewed at site	65
b. Not interviewed at site	43
Didn't attend Consulting Session	
a. Interviewed at site	55
b. Not interviewed at site	48
TOTAL	211
Total attending consulting session	108
Total not attending consulting session	103
	211
Total interviewed at site	120
Total not interviewed at site	91
	211

The completed data sets by Display topic by attendance at consulting sessions are:

TOPIC	No. Attending Consulting Session	No. Not Attending Consulting Session	TOTAL
IGE	25	26	51
CSM	27	25	52
FYCS	28	21	49
MEQ	28	31	59
TOTAL	108	103	211

As can be seen, the fortuitous self-selection into consulting sessions by the sample members produced nearly equivalent attendance and non-attendance at consulting sessions for each of the Display topics being studied.

D. Data Analysis

The analysis utilizes three types of statistics -- descriptive, difference, and correlation.

To facilitate the data analysis, two sets of composite measures were constructed. One was for the impact measures; the other was for the frequency of visits to staffs of schools at varying distances from the respondent.

The basic inputs to the impact measure were: information seeking, discussing the method with colleagues, considering possible use, recommending for use, trial of all or part of the method, and the decision to continue using or to reject the program along with implementation of that decision. The composite measure and the values assigned to each step are as follows:

Action steps interpreted from impact statements	Value used in data analysis
No Action	0
Sought information	1
Discussed with colleagues	2
Considered use (or recommended)	3
Sought information and considered use (or recommended for or against)	4
Tried the method (all or part)	5
Considered use (or recommended) and tried	6
Accepted for continued use or rejected after trial	7
Sought information, considered use (or recommended) and tried	8
South information, considered use (or recommended), tried, and accepted for continued use or rejected after trial	9

This scale takes into account two aspects of the adoption process not normally incorporated in diffusion research; (1) it allows for rejection as a rational and appropriate decision; and (2) it accounts for the distance moved in the adoption process. For example, a person moving through all stages of adoption to acceptance is given the highest value (9); on the other hand, the person who accepts after having already been at the trial stage is given a value of (7).

The composite measure on frequency of visits to staff members in other schools was constructed by assigning a value of 5 for contacts of one or more times a week; 4 for one to three times a month; 3 for one to five times a year; 2 for six to 11 times a year; and 1 for less than once a year.

These values were multiplied by 5 for visits to schools more than 100 miles away; by three for schools 15-100 miles away and by 1 for schools less than 15 miles away. The summation of these values for a respondent gave his composite measure on frequency of contact with staff in other school systems. These summated values were then assigned values of 1 to 9 as shown below:

Computed Composite Contact Score	Value Used in Data Analysis
9-12	1
13-16	2
17-20	3
21-24	4
25-28	5
29-32	6
33-36	7
37-40	8
41-45	9

A Least Squares delete program was run using the composite impact measure from the followup data as the criterion variable and 19 of the other variables as predictor variables.. Those included as predictor variables are as follows:

- Attended consulting session
- Sought information before Display
- Professional meetings attended outside school system
- Adoption level prior to Display
- Impact of Display
- Years experience in teaching
- Highest degree completed
- Composite score on visits to other schools
- Read about it in Professional Journals
- Rank of school on innovativeness
- No. of conferences and workshops attended within system

- Convenience to University
- Frequency of University contact
- No. of courses beyond last degree in past 3 years
- Viewer interviewed at site
- Respondent picked up flyer
- No. of persons coming to display with respondent
- Awareness of method prior to Display

This program provides the total variance in the inpact measure accounted for by all the predictor variables combined, then deletes them one at a time so that the contribution of each variable can be assessed.

The output for descriptive and difference statements regarding the findings are provided by a computer program which yields frequencies, percentages, Chi Squares, and means and standard deviations.

A Chi Square test was run on impact measures from the followup data for the four combinations of consulting and interviewing. This was to check the impact of the consulting sessions, and for the possible sensitizing effect of the on-site interviewing.

The descriptive data give a clearer picture of the number of persons at the various stages of adoption and allow comparison of the characteristics of persons in the samples.

E. Survey of Awareness of Displays and Methods Among Curriculum Coordinators

Another part of the study of the Educational Products Displays deals with the comarative awareness of the Displays and the Teaching methods covered in the Displays among two sets of curriculum coordinators. One set was those in schools within the potential exposure area where the Displays had been shown, and the other set was those in schools outside the potential exposure area.

Potential exposure area was defined as those schools within the boundaries of a State where the publicity for the Displays had been disseminated statewide. When the publicity was not on a statewide basis, the potential exposure area was defined by the geographic radius

within which publicity was distributed regarding the availability of the displays for viewing. One hundred school systems whose addresses fell within these defined exposure areas were randomly selected as the sample of those surveyed "within the area for potential exposure." Another 100 schools were randomly selected from the list of addresses of all other schools other than those defined above; this sample was taken as representative of those schools "outside the area of potential exposure" to the displays.

A one-page survey form (Appendix A-5) was mailed to the curriculum coordinator in each of the schools within the two subsamples.

A 72 percent return was received from an initial mailing and follow-up reminder. Telephone calls on a WATS line in connection with another project were used to obtain replies from those who had not responded by mail.

Analysis of these data was limited to reporting the number and percentages of respondents aware of each of the methods and the displays; and a tabulation of sources from which the respondents learn of these kinds of programs.

CHAPTER III

Findings

Significant gains in mean adoption scores were obtained from viewing the displays and attending the consulting sessions. The relationships between adoption scores and other variables were not as strong as desired, but some of these do offer hope for planning communication strategies. Those who attended a consulting session, e.g., were significantly higher on the adoption-impact measures than were those who had not attended a consulting session.

In presenting the findings, the first step will be to compare adoption levels across sites and teaching methods. That will indicate the extent to which data may be combined in further analyses. Next, adoption levels will be compared at three different points in time: (1) pre-display; (2) on-site after seeing the displays, and (3) delayed, i.e., 2 - 3 months after visiting the displays. The pre-display adoption scores were computed from respondents' reports (given at the display site) of their awareness, information seeking, and other action toward adoption prior to visiting the display site.

Following those analyses, some additional descriptive data will be covered, then the relationship between adoption level and other variables will be presented. For the study of those relationships, the "delayed" adoption measure (2 - 3 months after visiting the display) will be used.

The rationale for using the "delayed" measure is that it should more accurately reflect the impact of visiting the displays. The on-site interviews ask for intentions, while the "delayed" measure asks for action taken as a result of visiting the displays. The latter seems a more valid measure of the impact of visiting the displays on subsequent behavior pertaining to use

of the teaching methods. It should be kept in mind that the scores on the "delayed" measure may be somewhat lower for some respondents where they were well along toward adopting the methods prior to visiting the displays. Their potential set of actions pertaining to adoption is more limited than for someone not aware of the methods before visiting the displays. The discussion following Table 5 will clarify this characteristic of the measures.

A. Adoption Levels by Site and Teaching Method

Comparison of the mean adoption scores among the three display sites -- Methuen, Massachusetts; Boise, Idaho; and Hamilton, Montana -- showed virtually no differences prior to the respondents' visits to the displays. Although the measures taken 2 - 3 months following respondents' visits to the displays show statistically significant gains amounting to two or more steps on the adoption scale, the differences among sites at the time of the "delayed" measure are not statistically significant.

Table 1: Mean Adoption Scores Among Three Display Sites -- Methuen, Boise, and Hamilton -- Before Visiting the Displays, and 2 - 3 Months After Visiting the Displays

Display Site Attended By Respondents	Mean Adoption Scores Before Visiting Displays	2 - 3 Months After Visiting The Displays
Methuen	2.45	5.03
Boise	2.43	4.48
Hamilton	2.31	4.32

Since the difference among display sites were not statistically significant, the data across all sites will be combined for the remainder of the analyses.

In Table 2, it may be noted that there were some differences in mean adoption scores among topics at the pre-display point and again at the on-site data collection point. However, these differences had nearly disappeared by the time of the "delayed" adoption measure.

The differences between IGE and CSM, and between IGE and MEQ in the pre-display measures were statistically significant at the .01 level with t=2.70, and 2.55, respectively. At the time of the on-site measures, the difference between IGE and CSM was statistically significant at the .05 level (t=2.05), although not as large; and there also was a statistically significant difference between IGE and FYCS at the .05 level (t=2.04), at that time.

It appears from Table 2 that the action intentions reported for CSM and FYCS were more realistic than those for IGE and MEQ, since there was little change between the on-site and delayed measures for CSM and FYCS.

Table 2: Mean Adoption Scores and Standard Deviations for Respondents at Three Points in Time: Prior to the Display, After Seeing the Display, and 2 - 3 Months Following the Display

Teaching Method	Before Visiting The Displays		After Seeing The Displays		2 - 3 Months After Visiting The Displays	
	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s
IGE	3.67	4.00	6.24	3.15	4.73	2,73
CSM	1.75	3.23	4.62	3.35	4.51	3.14
MEQ	1.90	3.21	5.67	3.25	4.61	3.02
FYCS	2.40	3.93	4.07	3.75	4.62	2.78
All four methods	2.40	3.64	5.25	3.38	4.61	2.91

As may be noted in Appendix D-2, as well as from the mean scores in Table 2, there was higher awareness and more action toward adoption for IGE than for any of the other methods prior to visiting the displays.

Given the differences in adoption levels among methods at the two earlier times of data collection, the frequency tables in Appendix D were set up to show the values for each teaching method separately as well as for all four combined. Since the analyses involving relationships between adoption and other variables will use the "delayed" measure, the adoption scores based on data for all four methods combined will be used in those analyses.

Referring again to Table 2, the differences in mean adoption scores for all methods combined were statistically significant at beyond the .001 level between the pre-display and on-site measures (t=6.75), and between the pre-display and "delayed" measures (t=6.98); however, the differences between on-site and "delayed" measures were not statistically significant (t=1.75).

B. Comparing Levels of Adoption Behavior Before and After Visiting the Displays

As may be noted in Table 3, about 2/3 (65.1%) of the respondents reported no action regarding adoption of the methods on which they were interviewed prior to visiting one of the display sites; nearly 3/5 (57%) of them were not aware of the methods (Appendix Table D-2).

About 1/12 (8.5%) reported during the on-site interview that no action had been stimulated by their visit to the display site (Appendix Table D-3). Prior to visiting the display sites, about 1/4 (24.7%) reported they had at least tried some parts of one of the methods about which they were being interviewed; 2 - 3 months after visiting the displays, more than 2/5 (43.8%) said they had been stimulated to at least try some part of the method about which they were being interviewed. Some of these persons had gone on to full-scale use of the method.

Table 3: Number and Percentage of Respondents at Each Level of the Composite Adoption Measure Prior to Visiting the Displays, and 2 - 3 Months After Visiting the Displays

Adoption Level	Time Period To Which Adoption Measure Applies: Before Visiting The Displays N	%	2 - 3 Months After Visiting the Displays N	%
1. No action	140	65.1	17	7.9
2. Sought information	4	1.9	4	1.9
3. Discussed with colleagues	0	0.0	56	26.0
4. Considered use (or recommended use)	10	4.7	11	5.1
5. Sought information and considered (or recommended)	8	3.7	33	15.3
6. Tried it	1	0.5	7	3.3
7. Considered use and tried it	2	0.9	17	7.9
8. Accepted or rejected for continued use after trial	6	2.8	16	7.4
9. Sought information, considered use (or recommended) and tried it	6	2.8	24	11.2
10. Sought information, considered use, tried it, and adopted or rejected for continued use	38	17.7	30	14.0
TOTAL	215	100.1	215	100.0

The smaller number of respondents in category 10 of the "delayed" adoption-impact measure will be explained following Table 5. That discussion also will clarify the situation of the 17 respondents who reported no action on the "delayed" measure.

These data reveal more of the nature of the shifts in behavior than is apparent from a comparison of mean adoption scores. Detailed responses by

types of action for each of the four methods are shown in Appendix Tables D-1 to D-4.

The subset of respondents who were interviewed at the display site is about half of the total sample. They are the only ones for whom a comparison of pre-display and on-site action steps is possible. These data are shown in Table 4. It will be noted that the shifts in percentages for each action category are similar to those in Table 3; however, the inflated intentions regarding continued use reported in the on-site interviews is apparent.

Table 4: Number and Percentage of Respondents at Each Level of the Composite Adoption Measure Before and After Seeing the Display

Adoption Level	Time Period on Which Adoption Measure Is Based: Before Visiting The Display N	%	After Seeing The Display N	%
1. No action	66	62.9	9	8.6
2. Sought information	4	3.8	12	11.4
3. Discussed with colleagues	0	0.0	11	10.5
4. Considered use (or recommended use)	5	4.8	3	2.9
5. Sought information and considered (or recommended)	4	3.8	15	14.3
6. Tried it	0	0.0	3	2.9
7. Considered use and tried it	2	1.9	7	6.7
8. Accepted or rejected for continued use after trial	5	4.8	0	0.0
9. Sought information, considered use (or recommended) and tried it	3	2.9	10	9.5
10. Sought information, considered use, tried it, and adopted or rejected for continued use	16	15.2	35	33.3
TOTAL	105	100.1	105	100.1

Another set of data summarizing the differences in adoption-impact measures is provided in Table 5. These data show the overwhelming majority of respondents were stimulated to take further action toward an adoption decision following their visit to the display sites.

Table 5: Summary of the Differences Between Pre-Display Adoption Scores and the Adoption-Impact Scores 2 - 3 Months After Visiting the Displays

Direction of Differences in Scores	Number and Percentage of Respondents for Each Category of Direction in Difference Scores	
	N	%
Scores increased	144	68.2
Scores didn't change	28	13.3
Scores decreased	39	18.5
TOTAL	211	100.0

As noted earlier, the adoption measures taken 2 - 3 months after visiting the displays focused on changes stimulated by the visit to the display. If someone already were well along in the adoption process, he could not advance further. Thus, their scores on the "delayed" measure may show no change or a decline from the pre-display scores.

A check of the 28 individuals who reported no change showed that 13 of them had decided about continued use of the method before coming to the displays; 11 others had not sought information or even been aware of the methods prior to the displays, and they did nothing after visiting the displays. One was at the trial stage before coming to the displays and was continuing the trial at the time of the delayed measure; 2 others were considering use

when they came to the displays and were still considering use of the methods three months later.

Of the 39 whose scores were lower on the delayed measure, 22 had already decided about continued use or rejection prior to the displays, and thus were not stimulated by the displays to go beyond that level. Several of them did discuss the methods further with their colleagues, but that action would receive a lower value than a decision to adopt or reject.

Thirteen of the 39 were at the trial stage and were not stimulated to move beyond that level. Of 4 persons at the pre-trial stage of adoption prior to the displays, 2 were not stimulated to any action by the displays; the other 2 only discussed the method with colleagues.

Of those who had higher scores on the delayed measure than on the pre-display measure, 11 reported moving from no awareness to a decision to use the method on a continuing basis.

In the section of this chapter which deals with relationships between adoption and other variables, three special subsets of respondents will be scrutinized quite carefully. These include those respondents who:

1. Scored 9 on the pre-display measure and 9 on the "delayed" measure.
2. Scored 0 on the pre-display measures and 0 on the "delayed" measure.
3. Scored 0 on the pre-display measure and 9 on the "delayed" measure.

It is expected that looking at the characteristics and behaviors of these special subsets may give some insights into relationships which may be obscured in the analyses of the total set of data.

C. Time Spent Viewing the Displays

The construction of the displays was such that the time required to attend to the full set of content was greater for the Center panel than for either the Right or Left panels. This is reflected in the mean viewing times for the three parts of each display module.

The Center panel contained a set of slides or a film clip to be viewed while listening to a tape recorded commentary on individual earphones. It was often noted by the observer-timers that the members of the sample would also look at the two side panels while listening to the tape recording and waiting for the slides to change. When this dual attending was observed, the time spent looking at the side panels was recorded for those panels too.

Table 6: Mean Viewing Time in Seconds for Each of Three Panels in Each of Four Displays

Display Title	Panel			
	Left	Center	Right	Total
IGE	40 sec.	199 sec.	26 sec.	265 sec.
CSM	27 sec.	199 sec.	26 sec.	252 sec.
MEQ	12 sec.	182 sec.	23 sec.	217 sec.
FYCS	20 sec.	162 sec.	19 sec.	201 sec.
Average for all four	25 sec.	186 sec.	23 sec.	234 sec.

An analysis of variance of the mean scores in Table 6 showed no statistically significant difference among sites, but a highly significant difference between the Center panel and the other two panels.

It will be seen that the average time devoted per person per display, averaging all together, was about four minutes. Several persons commented to

those around the displays that it would help to have chairs to sit while viewing and listening. They said that standing all that time to get the messages was very tiresome, especially after teaching all day.

While the mean viewing times give an indication of the amount of time persons will spend attending to messages in the displays, they can be compared more meaningfully when seen as ratios of total time required to view a panel completely.

For each of the displays, ten persons were asked to read all of the content on each panel and listen to the entire message on tape while their viewing and listening times were recorded. The average of these ten was taken as a base from which to construct a ratio of the mean viewing time per panel to the required time to attend to the entire message. These ratios are shown in Table 7. It will be noted that the ratios tended to be higher for the Center and Left panels than for the Right panels.

Table 7: Ratio of Mean Viewing Time To Required Viewing Time for Each Panel of Each of The Four Displays

	Mean Viewing Time/Required Viewing Time			
Display Title	Left Panel	Center Panel	Right Panel	All Panels
IGE	0.98	0.92	0.27	0.75
CSM	0.71	1.03	0.29	0.74
MEQ	0.21	0.82	0.51	0.67
FYCS	0.48	0.62	0.26	0.54

It also will be noted from the ratios that the total of the viewing times ranged from 54 to 75 percent of the time required to attend to the full message in each of the displays. In the case of IGE, it was 75 percent of the time

required to attend to the complete set of messages. There were some cases where persons listened to the tape recorded message a second or third time and, of course, there were some who barely had time to assess the nature of the content before moving on.

Many of the viewers said they wished that they had had more chance to handle the materials shown in the pictures or mounted on the display panels. Additional comments of this nature are contained in Appendix C-3.

In addition to the time spent viewing, the positive responses to the displays are further documented in Appendix Table D-7. In that table, it will be noted that nearly 4/5 (70.2%) expressed positive feelings about the displays in general; and 2/5 (40.6%) indicated that the displays had contributed to a more positive attitude toward NIE/HEW. Another 2/5 (43.8%) said the displays had not affected their feelings toward NIE/HEW. In Appendix C-5, there is a set of responses regarding the effect the displays had on feelings toward NIE/HEW. That set will give more insight into the nature of the positive-neutral-negative categories used to provide a summary of feelings expressed.

Appendix C 1 contains comments from respondents about their general feeling regarding the displays. Other parts of Appendix C contain comments about most useful and least useful aspects of the displays, further information wanted, and sources from which they had learned about the displays.

D. Characteristics of Respondents

Nearly 3/4 (73.8%) of the respondents were teachers and more than half (57.3%) had taught 10 years or less; and 70 percent had taught from 1 to 15 years. Slightly more than 1/4 (27%) were school administrators. Of those administrators, half had been in administrative positions for five years or less.

More than 3/5 (63.4%) had a B.A. degree; 3/10 (29.1%) had an M.A. degree; 5.6% had less than a B.A. and the remainder (less than two percent) had more advanced degrees. More than 1/4 (27.2%) had taken no courses beyond their last degree in the past three years; 2/5 (44.1%) had taken from one to five courses beyond the last degree; 5.2% had taken more than 16 courses beyond the last degree; and the remaining 1/4 (23.4%) had taken from 6 - 15 additional courses.

More detailed breakdowns of the data on characteristics of respondents are in Appendices D-8, D-14 and D-15.

Nearly 3/4 (73.2%) of the respondents were from school systems ranging in size from 1,000 to 25,000 pupils. The percentages in each category of school size are in Appendix D-9.

E. Effect of On-Site Interviews

The influence of on-site interviewing was not statistically significant, although the data showed slightly higher adoption scores for those who had been interviewed than for those not interviewed at the display site. When interviewing of respondents on-site and respondents' attendance at a consulting session were combined in the same matrix for analysis, a significant Chi Square was obtained. However, when the attendance at a consulting session was controlled, the differences in adoption scores for respondents who were interviewed on-site and those who were not interviewed on-site were not statistically significant for either those who had attended a consulting session or for those who had not attended a consulting session.

There is the possibility that asking the questions about adoption level prior to coming to the displays had some sensitizing effect which would minimize any potential difference which the interviewing may have had on adoption levels later. That aspect of the data collection didn't, however, focus attention

on the various aspects of the teaching method and the displays to the extent that the complete interview did. Furthermore, data collected from a sample of respondents from the Tacoma, Washington displays, a site where no interviewing and no consulting sessions were conducted, also supported the inference of no significant effect as a result of the on-site interviewing.

Twenty-four names and addresses were randomly selected from the list of registrants obtained by Instructional Dynamics, Inc. at the Tacoma, Washington display site. When submitted to a t-test, the mean "delayed" adoption-impact scores for the Tacoma sample ($\bar{x}$ = 4.13) did not differ significantly from the means on "delayed measures from the three sites used in this study (see Table 1, p. 15).. A Kolmogorov-Smirnov test of the differences in the distribution of "delayed" adoption-impact scores between the Tacoma sample and the subsample of respondents from the other three sites who had not attended a consulting session nor been interviewed also yielded no statistically significant difference. This gives a firmer base for the conclusion of no significant difference due to the on-site interviewing.

F. Relationships Between Adoption Level and Other Variables

Although not all of the data meet the assumptions of interval measurement and normal bivariate distribution, correlation matrices were constructed for selected variables. It is believed that the effect of not meeting the assumptions with the particular distributions in these data has been to reduce the magnitude of the correlations.

Keeping this caution in mind and the presence of significant Chi Squares, selected correlations may be considered in manipulating the data in efforts to gain additional insights into relationships and in identifying guides to communication strategies.

1. A Least Squares Delete analysis extracted four variables from among fourteen which had been submitted for correlation with the "delayed" adoption-impact measure. The multiple correlation of these four with the "delayed" adoption-impact measure was 0.526, accounting for 27.6 percent of the variance in that measure.

Table 8 shows: (a) the four variables with the correlation of each individually with the adoption-impact measure; (b) the partial correlations for each of the four with the adoption-impact level while holding the remaining three constant; and (c) the squared partial correlations. The table also includes five more variables which individually yielded correlations which were statistically significant at the .05 level or beyond.

Table 8: Variables Which Correlated With the "Delayed" Adoption-Impact Measure at the .05 Level of Significance; the First Four Being the Set for the Multiple Correlation-Regression Analysis

Variable	Simple Correlations (rxy)	Partial Correlations (rxy zzz)	Partial Correlations Squared	Multiple Correlation (Ry. 1234)
1. Sought information about the teaching method prior to the visiting of displays	0.399***	0.362	0.131	
2. Attended a consulting session at displays	0.292***	0.225	0.051	0.526***
3. Read about the method in Research & Development reports	0.158*	0.159	0.025	
4. How convenient for the staff to visit a university staff member	0.303***	0.219	0.048	
5. Attendance at professional meetings	0.246**			
6. Aware of method prior to visiting the displays	0.243**			
7. Read about method in professional journals	0.179*			
8. Rank of school system on trying new ideas	0.157*			
Highest degree completed	0.135*			

* Significant at .05 level
** Significant at <.005 level
*** Significant at <.0005 level

It will be noted that none of these variables account for an appreciable amount of the variance in the adoption measure; however, the four taken together for the multiple correlation accumulate a somewhat more respectable level of relationship. It may be noted also that all four pertain to information seeking behaviors.

Frequently the statement is made that studies of communication and other aspects of human behavior are appropriately multivariate in nature; that many variables are impinging on the behaviors in each communication event and need to be considered together to get a stronger base for explanation and prediction. That position seems to be supported by the present analysis when it is noted that the highest proportion of the variance accounted for by a single variable is thirteen percent, while including three other variables brings the variance accounted for up to a little more than 27 percent.

Taking two of the variables with the highest simple correlations -- "sought information prior to the display" and "attended a consulting session" -- yields a multiple correlation of 0.474, accounting for 22.5 percent of the variance. Another pairing of variables -- "attended a consulting session" and "read about the method in Research and Development reports" -- yields a multiple correlation of 0.384, accounting for 14.7 percent of the variance. Still a third pair -- "sought information prior to the display" and "read about the method in Research and Development reports" -- yielded a multiple correlation of 0.458, accounting for 21 percent of the variance in the "delayed" adoption-impact scores.

Looking at some of these relationships more specifically and from another perspective may give additional insight which will help in efforts to improve the ability to explain and predict the effects of communication behavior as it pertains to adoption of new practices.

2. Attendance at consulting sessions exhibited one of the second strongest relationships with the adoption-impact measures of any of the variables studied. The differences may be seen in Table 9. The adoption-impact categories were combined to provide minimum cell sizes recommended to compute the Chi Square which was statistically significant at the .001 level of probability. Appendix Table D-17-D shows the breakdown for all ten categories separately. The Chi Square produced by computer analysis using all ten categories was equally strong.

Table 9: Number and Percentage of Respondents Reporting Each of Four Levels of Impact of the Displays 2 - 3 Months After Visiting the Displays

Consulting Session Attendance	Levels of Adoption-Impact Scores: No Action N	%	1 - 2 N	%	3 - 6 N	%	7 - 9 N	%	Total N	%
Attended	4	3.7	22	20.4	36	33.3	46	42.6	108	100.0
Did not Attend	13	12.6	38	36.9	30	29.1	22	21.4	103	100.0
TOTAL	17	8.1	60	28.4	66	31.3	68	32.2	211	100.0

Chi Square = 17.94 at three degrees of freedom, p == .001

Among the "no action" group, 9 of the 13 who had not attended the consulting sessions were at the lowest adoption-impact score value both prior to visiting the display and again 2 - 3 months after visiting the displays; the other 4 were at the highest adoption-impact level on both the "pre-display" and "delayed" measures. Table 10 shows the breakdowns for two of the three special subsets of respondents noted on page 21.

Table 10: Attendance at Consulting Sessions for Two Subsets of Respondents Based on Their Pre-Display and "Delayed" Adoption-Impact Measures

"Pre-Display" and "Delayed" Adoption Scores	Attended Consulting Session			
	No		Yes	
	N	%	N	%
0 - 0	9	69.2	2	22.2
9 - 9	4	30.8	7	77.8
TOTAL	13	100.0	9	100.0

The data in Table 10 and other data to be presented later suggest that those high on the adoption-impact measures were persons seeking information. The 0 - 0 category tended not to attend the consulting sessions; the 9 - 9 category tended to attend the consulting session even though they had already decided about continued use of the methods. In terms which Rogers and others have used in identifying adoption propensities of individuals, the 9 - 9's would appear to be innovators and early adopters; the 0 - 0's would appear to be the laggards or at least the late adopters. Innovators and early adopters are high information seekers and users.

Attendance at the consulting sessions also was positively related to several other variables. The specific breakdowns by categories are shown in Appendix Table D-17, along with the Chi Square values. Among these variables were:

1. Highest degree completed
2. Frequency of contact with college or university staff regarding teaching methods
3. Four of the specific behaviors pertaining to adoption which respondents said had been stimulated by visiting the displays:
   a. discussed method with colleagues
   b. recommended the method for school system
   c. tried parts of the method
   d. adopted parts of the method for continued use

4. Attendance at professional meeting and demonstrations as the most useful source in deciding about use of the method

5. Reading about the method in Research and Development pamphlets

3. Innovativeness of the school system was another of the variables that was expected to be related to level of adoption. In Table 10, it may be seen that there is a statistically significant relationship between the innovativeness measure and the adoption-impact measure. The five rankings on innovativeness were collapsed into three, and the adoption levels were collapsed into five to provide the cell frequencies needed for Chi Square tests.

Table 11: Number and Percentage of Respondents at Different Adoption-Impact Levels by Ranking of School System on Innovativeness

Adoption-Impact Levels (Collapsed Scale)	Ranking of School System on Trying New Instructional Programs: Earlier Than Average N	%	Average N	%	Later Than Average N	%	Total N	%
No action	5	31.2	9	56.3	2	12.5	16	100.0
Sought information and/or discussed with colleagues	31	50.0	14	22.6	17	27.4	62	100.0
Recommended	12	57.1	6	28.6	3	14.3	21	100.0
Tried	16	42.1	15	39.5	7	18.4	38	100.0
Decision to adopt or reject	33	51.6	17	26.6	14	21.9	64	100.1
TOTAL	97	48.3	61	30.3	43	21.4	201	100.1

Chi Square 21.96 at 8 degrees of freedom; significant .01 level

Of the 64 who had arrived at the decision stage regarding continued use, 47 (73.4%) had decided to use the methods and 17 (26.6%) had decided to reject use of the methods.

In addition to the Chi Square computed with the collapsed cells, a

statistically significant correlation of 0.157 between the "delayed" adoption-impact measure and the ranking of the school system on innovativeness was obtained. Although it was statistically significant, it shows quite a weak relationship, accounting for only 2.5 percent of the variance.

It also may be that three levels of discrimination of earliness or lateness in trying new ideas would introduce less random variability; i.e., perhaps respondents can readily say whether they are earlier than most, later than most or about average; but when asked to say how much earlier or how much later, the demand for increased precision may reduce the accuracy of the ranking.

It would seem to be quite significant operationally as well as statistically that half of those who had arrived at a decision regarding continued use of the teaching methods ranked their school system as earlier than average in trying new ideas.

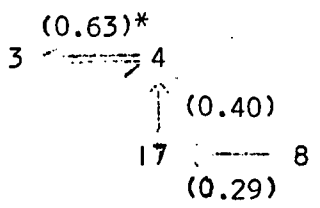
However, that is tempered by the fact that the distribution is skewed toward earlier adoption. About 1/5 saw their system as later than average, while half saw their school system as earlier than average in trying new ideas. That proportion holds roughly on each of the action categories, except "no action", where a little more than half perceive their system as average on innovativeness. Thus, while there appears to be some relationship between perceived innovativeness and adoption, it is safe to say that in the present case that relationship was quite weak.

4. Study of the relationship among other variables In the matrix used for the Least Squares analysis reflects the interdependence among several of the variables.

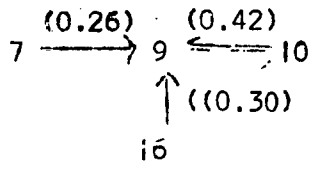
Looking at the variables on the list on pages 30 and 31, it is found

that frequency of contact with university staff correlates with attendance at professional meetings outside the school system 0.21 where a correlation of 0.14 is significant at the .05 level (two-tailed test). Frequency of university contact correlates 0.29 with frequency of contact with staff in other school systems regarding teaching methods; and the highest degree completed correlates 0.32 with attendance at professional meetings outside the school system. Although all of these correlations are relatively weak, they do support the position that there is a positive relationship among the information seeking behaviors of the respondents.

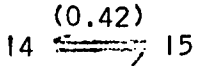
An Elementary Linkage Analysis (McQuitty, 1957) shows which variables have the highest degree of association with one another. The diagrams of the linkages help to visualize the inter-connections which emerged from an analysis of the matrix used in the Least Squares Delete analysis:



3 - Aware of method prior to visiting the displays
4 - Sought information about the method prior to visiting the displays
17 - "Delayed" adoption-impact measure
8 - Attended consulting session



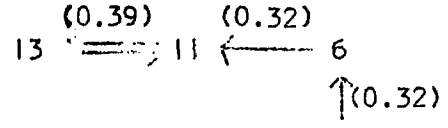
9 - Convenience to a university
10 - Frequency of contact with university staff members
16 - Respondents ranking of innovativeness of school system
7 - Number of courses taken beyond last degree



14 - Read about the teaching method in professional journals
15 - Read about the teaching method in Research and Development reports

---

*The numbers in parentheses are the correlations between the pairs of variables connected with the arrows.



13 - Frequency of contact with other school systems
11 - Frequency of attendance at professional meetings outside one's own school system
6 - Highest degree completed
5 - Years of teaching experience
12 - Number of conferences and workshops attended within one's own school system

Recalling the discussion on innovativeness of the school system in the previous section, it's interesting to note that the ranking on innovativeness and the number of courses taken beyond the last degree both link with convenience of visiting a university staff member.

5. A comparison of some characteristics and behaviors of respondents by display sites highlights some differences which might be expected and some others which might not be expected. The detailed data for these comparisons are in Appendix D-17 and D-18. Among those where the differences were great enough to produce significant Chi Squares are the following:

a. Highest degree completed showed significantly more M.A. degrees completed by the Methuen respondents than for those at the other two sites.

b. Frequency of university contact was higher for Hamilton and Boise than for Methuen.

c. Attendance at conferences within the school system was higher for both Boise and Methuen than for Hamilton, with Boise somewhat higher than Methuen.

d. Attendance at professional meetings and workshops outside the school system was highest for Methuen and lowest for Boise with Hamilton about midway between the other two.

e. Perceived innovativeness of the school system was highest among the Boise respondents followed by Methuen and Hamilton in that order.

These data do reflect some distinct differences in characteristics of the three school systems. Boise, e.g., had a relatively new school administration which had been encouraging adoption of new teaching methods. Respondents commented that the new administration was making their system more innovative.

With a larger system, such as Boise, it might be expected that there would be more intra-system conferences, especially when the administration is pushing for change. A close working relationship between the Boise School System and Boise State College would encourage frequent contact between the two staffs and the data reflect that behavior. With the smaller geographic areas covered within a given system boundary in the Eastern Seaboard States, it could be expected that it would be easier, hence more likely, that contacts outside the system might be higher for Methuen than for the two systems in the Western Plains and Mountain areas.

The number of respondents who reported reading about the methods was relatively low, e.g., 54 total (1/4 of the respondents), for reading about the methods in Research and Development reports. Nearly half of these, 26 of the 54, were Methuen respondents.

Detailed data are not available from this study as to the nature of information relayed to colleagues by those who reported reading about the methods in research and development reports or professional journals. However, the number who reported discussing the methods with their colleagues suggests that there is this kind of sharing occurring.

G. Feedback From Consulting Sessions

As might be expected, given the positive relationships between attendance at consulting sessions and adoption-impact measures, the reactions to the consulting sessions were generally favorable.

The mean scores on the evaluations of useful, interesting, informative, exciting, and up-to-date were all on the positive side of the scale which ranged from a minus two to a plus two. The highest rating was for the CSM sessions where mean reached 1.74 for usefulness at the Methuen site. Details of these measures are shown in Appendix B. It should be kept in mind that at the

Cambridge site, the displays could not be set up and when that became known the anticipated audience of teachers did not attend. Even so, the ratings on the consulting sessions at Cambridge were positive.

Less than 1/8 of the respondents indicated that too much information had been presented in the consulting sessions. Most respondents said the amount of information presented was about right, although several said they wished they could have had more information about the method.

Of those attending the consulting sessions, the proportion who had not known about the method before visiting the display site varied by topic and by site. However, a rough average shows that about 2/3 did not know about FYCS previously; about 1/3 did not know about IGE; about 3/4 did not know about CSM before; and between 1/2 to 4/5, depending on site, did not know about MEQ prior to visiting the display sites.

Appendix B also shows responses regarding importance of different kinds of information presented in the sessions for each of the topics at each of the sites.

H. Awareness of Methods and Displays Among Two Samples of Curriculum Coordinators

It will be noted in the following table that awareness of the teaching methods among the curriculum coordinators is higher than awareness of the displays. About half of them knew of the Individually Guided Education and the Adult Basic Education methods. For the other methods, the proportion who were aware ranged from 1/7 to about 1/3. One-fifth of those within the potential exposure area were aware of the displays, while 1/10 of those outside the potential exposure area were aware of the displays. As may be seen, much smaller percentages had visited one of the display sites.

Table 12: Summary Comparisons of Awareness of Education Products and the Displays for 100 Schools Within Potential Area For Exposure to Displays and For 100 Schools Outside Potential Area for Exposure to Displays

Awareness Measure for Curriculum Coordinators	Schools Within Exposure Area		Schools Outside Exposure Area	
	N	%	N	%
1. Had heard about the displays	20	20.0	10	10.0
2. Had visited a display site	7	7.0	2	2.0
3. Knew of someone else in school system who had visited a display site	8	8.0	4	4.0
4. Knew of teaching method:				
a) Individually Guided Education	51	51.0	40	40.0
b) Match Units	14	14.0	7	7.0
c) Home Oriented Early Children Education	30	30.0	31	31.0
d) Mini-Course on Effective Questioning	29	29.0	26	26.0
e) First Year Communication Skills	13	13.0	12	12.0
f) Comprehensive School Math Program	26	26.0	34	34.0
g) Adult Basic Education	52	52.0	49	49.0
h) Cooperative Urban Teacher Education	18	18.0	13	13.0
i) Reinforced Readiness Requisites	16	16.0	15	15.0
j) Patterns in Arithmetic	30	30.0	26	26.0

Although the awareness of the displays and the number visiting the displays is greater within, than outside the exposure area, the differences between the two sets of responses are not statistically significant.* It appears that extensive awareness of the displays was not achieved among curriculum coordinators.

As for learning about new teaching methods such as those covered in the displays, the preferred sources appear to be professional meetings, professional periodicals, State Departments of Education and colleges and universities.

*The one exception is "heard about displays" with a Z of 2.00 which is significant at the .05 level.

Table 13: Information Sources Cited by Curriculum Coordinators for Learning About the Displays and the Teaching Methods (Multiple responses were given by some persons)

Information Source	How First Found Out About Displays		How First Heard About Teaching Method		How Usually Find Out About New Teaching Methods of This Type	
	N	%	N	%	N	%
A. Within Exposure Area:						
Reading Consultant	0	0.0	2	2.0	0	0.0
Professional Meeting	1	1.0	12	12.0	39	39.0
Educational Companies	0	0.0	1	1.0	15	15.0
Other Persons (Word-of-Mouth)	4	4.0	17	17.0	32	32.0
College or University	2	2.0	10	10.0	18	18.0
USOE	1	1.0	0	0.0	0	0.0
State Dept. of Education	5	5.0	23	23.0	26	26.0
Local School System	2	2.0	3	3.0	6	6.0
Professional Periodicals	4	4.0	21	21.0	44	44.0
Books, Pamphlets, etc.	0	0.0	4	4.0	7	7.0
Personal Research	0	0.0	2	2.0	0	0.0
Displays	0	0.0	1	1.0	0	0.0
TV and Newspapers	0	0.0	2	2.0	3	3.0
Regional Educational Organizations	0	0.0	3	3.0	2	2.0
B. Outside Exposure Area:						
Reading Consultant	0	0.0	0	0.0	0	0.0
Professional Meeting	2	2.0	13	13.0	39	39.0
Educational Companies	0	0.0	1	1.0	16	16.0
Other Persons (Word-of-Mouth)	5	5.0	16	16.0	23	23.0
College or University	1	1.0	5	5.0	17	17.0
USOE	0	0.0	0	0.0	0	0.0
State Dept. of Education	1	1.0	3	3.0	13	13.0
Local School System	0	0.0	0	0.0	1	1.0
Professional Periodicals	1	1.0	21	21.0	40	40.0
Books and Pamphlets, etc.	2	2.0	8	8.0	23	23.0
Personal Research	0	0.0	0	0.0	1	1.0
Displays	0	0.0	0	0.0	1	1.0

The preference for professional meetings seems appropriate in view of the relationships found in the interviews conducted with the samples of all viewers selected at the display sites. It will be remembered from earlier sections of this report that professional meetings were listed as one of the most useful sources. It also should be noted that those who visited the display sites

were generally positive in their reactions to the displays, and that attendance at consulting sessions was significantly related to adoption behaviors.

Although there were problems in sampling and in carrying out the design as initially planned, it has been possible to obtain adoption-impact measures based on pre-display, on-site, and 2 - 3 months post-display data collections. It also has been possible to obtain data to identify relationships among the several variables included in the study.

While it is not possible to project the findings on adoption to a national population, it can be said that those who visited the displays were affected in the direction of increased movement toward adoption of the practices. It also can be stated within the criteria set for the statistical analyses that the relationships found among the variables hold for the hypothetical population of which the respondents are a sample. Given that the three school systems at the three sites where data were collected handled the displays and consulting sessions as in-service days and dismissed teachers to attend, it is assumed that nearly all teachers within those host systems attended the displays and/or consulting sessions sometime during the period they were available at those sites.

The findings will be summarized in the next chapter along with some recommendations for communicating to effect change in teaching methods in school systems.

CHAPTER IV

Summary and Recommendations

A. Summary

Statistically significant gains in adoption-impact scores, for the four teaching methods studied, occurred following visits to the Educational Products displays by the persons from whom data were collected. The mean scores **prior** to visiting the displays were 2.40; and two to three months following the visits to the displays the mean scores were 4.61. The scores obtained following viewing of the displays at the display sites were somewhat higher than the "delayed" measures, but that difference was not statistically significant.

The four methods included in this study were: Individually Guided Education in Multi-Unit Schools (IGE); Comprehensive School Math (CSM); Mini-Course on Effective Questioning (MEQ); and First Year Communication Skills (FYCS). These were selected for study from among the ten modules which had been constructed.

Four variables yielded a multiple correlation of 0.526 with the "delayed" adoption-impact scores, accounting for 27.6 percent of the variance in the adoption measure. These variables were: (1) sought information about the teaching method prior to visiting the displays; (2) attended a consulting session at the display site; (3) read about the method in research and development reports; and (4) convenience of visiting with university staff about teaching methods. A multiple correlation computed with only the first two of these four variables yielded a multiple correlation of 0.47, accounting for 22.5 percent of the variance. This reflects the strong impact of the consulting sessions in moving respondents toward adoption decisions when

coupled with prior information seeking behavior.

Sixty-five percent of the respondents had taken the action and 3/5 did not know about the teaching methods prior to visiting the display sites. That dropped to less than 10 percent who had taken no action toward adoption of the methods following the visits to the display sites.

There were no statistically significant differences among sites in adoption-impact measures either before or after visiting the display sites. There were significantly higher adoption levels for the IGE method compared to two of the other methods prior to the displays and at the display site; but those differences were no longer statistically significant at the time of the "delayed" measures.

The average viewing time for the display modules was about four minutes. In analyzing the relationships of viewing time to the "delayed" adoption-impact measure, the simple correlations were not statistically significant.

When asked their general reactions to the displays, about 4/5 of the respondents were positive in their comments. When asked what effect, if any, the displays had had on their feelings toward NIE/HEW, about 2/5 gave positive comments; about 2/5 said it had not had any effect, and the remainder of the responses tended to be negative. Several of the comments are listed in Appendix C.

Nearly 3/4 of the respondents were school teachers and the remainder were school administrators. These were the two groups admitted as possible sample members in screening those who passed through the displays. This was to obtain a sample of those who would be directly involved in implementing the teaching methods. About 30 percent had M.A. degrees, about two percent had degrees beyond the M.A., and most of the others had a B.A. With the sites included in the study, about 3/4 of the respondents were in school systems

with a pupil population between 1,000 and 25,000.

For three of the methods -- CSM, IGE, and MEO -- approximately 2/3 to 4/5 said the consulting sessions made them think about trying new approaches in their teaching; and about the same proportion said it made them think about adopting parts of the methods; while about 1/10 to 1/4 said it made them think about adopting the complete method. The responses for the FYCS sessions were somewhat lower, ranging from 1/2 to 2/3 who were stimulated to think about trying some new approaches and specifically trying parts of the method as presented. About 1/8 or less said they would reject the method entirely.

An Elementary Linkage analysis showed the interconnections among the variables included in the study. Awareness prior to displays, information seeking prior to the displays, "delayed" adoption-impact measures, and attendance at a consulting session at the display formed one linkage.

A second linkage included: convenience of visiting university staff, frequency of contact with university staff, ranking of innovativeness of school system, and number of courses taken beyond the last degree. The third linkage contained the variables on reading about the methods -- professional journals, and research and development reports.

The final linkage included: frequency of contact with other school systems, frequency of attendance at professional meetings outside the school system, highest degree completed, years of teaching experience, and attendance at conferences and workshops within the school system.

Some differences in characteristics among respondents at the three sites were generally those which would be anticipated between a highly urbanized part of the USA and the Plains-Rocky Mountain section of the country.

About 1/5 of the curriculum coordinators in the potential exposure areas

of the USA were aware of the displays compared to about 1/10 in the non-exposure areas. About half of both samples were aware of IGE and Adult Basic Education. Somewhat fewer were aware of the other methods with only 1/8 to 1/10 being aware of MATCH Units and FYCS.

The most common sources of information cited for learning about these methods by the curriculum coordinators were professional meetings and professional journals. Roughly 2/5 of both samples listed each of those sources. Word-of-mouth was the next most common source.

The firmest conclusion in regard to the displays was the strong impact of the consulting sessions on subsequent behavior of those attending.

B. Recommendations

The necessity of providing specialists to discuss the teaching methods stands out among the findings as a needed component of displays intended to stimulate adoption of new practices. In regards to teaching methods displays, these specialists should be prepared to discuss the effects of the method on students' learning, the availability and cost of materials required, staffing requirements, underlying principles on which the method is based, and how to use the method. Those attending are especially anxious to get their hands on materials used with the method and to have these materials demonstrated.

It is apparent that no single source of messages is used uniformly in gaining information. Those which were most highly associated with moves toward adoption of the teaching methods studied here were reading about the methods in professional journals and in research and development reports. It seems especially important that information on new methods be continually presented via those channels. Anything that can be done to supplement those sources with exposure to new methods in professional meetings and workshops

would encourage further action toward adoption.

The large percentage who indicated they had discussed the methods with colleagues, suggests the potential for systematic follow-up activities subsequent to visits to displays and consulting sessions. The discussions could involve both information seeking and assessment of information already gathered. The availability of additional information, especially via demonstrations in the schools as mentioned by some respondents, could shift the reward/effort ratio in a direction positive enough to stimulate adoption.

A future test of communication approaches to facilitate adoption should include video-taped messages instead of display modules, with a specialist to lead a discussion and answer questions raised by the video-tape stimulus.

While convenience and frequency of visiting with university staff did not correlate highly with the adoption-impact measures, there was a positive relationship, and the inter-connections among these variables and others pertaining to contacts external to the given school system, suggests the importance of using the university as a channel in getting new methods to teachers and administrators.

A study needed to gain further insight into the decision-adoption process for new teaching methods is an identification and analysis of the communication networks by which messages regarding new practices are introduced into a school system and the pathways by which those messages diffuse through the system. This type of study could identify entry points and pathways which would be most likely to facilitate message flow. That type of data would be most useful in planning communication strategies in large school systems, recognizing that the networks become increasingly complex as the size of the system increases.

In the present study, a composite adoption measure was introduced. It was designed to give additional weight to the respondent who went through more steps during the course of the study in moving toward implementation of a decision to adopt or reject a given practice. At this time, that seems to be a desirable move, but some further refinement is needed in establishing input measures and categories which could provide a more uniform distribution of respondents over the categories.

In conclusion, the data definitely indicate the displays and consulting sessions increased awareness of the methods and stimulated further action toward decisions regarding adoption of the methods. The relationships found among the variables included in the study suggest some directions for continued efforts to increase the acceptance of new methods.

References

McQuitty, Louis, "Elementary Linkage Analysis," Educ. Psychol. Measurement, 1957, 17: pp. 207-29.

Rogers, Everett and Shoemaker, Communication of Innovations -- A Cross-Cultural Approach, The Free Press, Glencoe, Illinois, 1971.

Sarbaugh, L. E. and Hawkins, Brian, et. al., An Investigation of Communication Efforts and Their Relation to the Adoption of Ten Reading Programs, Report to NCEC/NIE/HEW, Conducted by Department of Communication, Michigan State University, East Lansing, Michigan, 1973.

Walsanen, F. B., "Actors, Social Systems, and the Modernization Process," paper presented at Carnegie Seminar on Political and Administrative Development, Indiana University, Bloomington, Indiana, 1969.

APPENDIX A

Data Collection Instruments

A-1 On-Site Observation Form and Record of Adoption Level Prior to Arriving at Display (pink form)

A-2 On-Site Interview Form (green form)

A-3 Follow-Up Survey Form (yellow form)

A-4 Feedback Form From Consulting Sessions (gold form)

A-5 Survey of Awareness of Displays and Methods in Potential Exposure Areas VS. Areas Where Displays Had Not Been Shown (blue form)

A-6 Instructions to Observer-Interviewers (pink form)

A-7 Instructions Used With Consulting Sessions (green form)

EXHIBIT OBSERVATION RECORD Form A

Display Title _____

Name of Observer _____ Subject Number _____

Location _____ Did he come alone? _____

Date _____ With company? _____ (Number)

Time of Day _____ 8-10 am
_____ 10-12 am
_____ 12-2 pm
_____ 2-4 pm
_____ 4-6 pm
_____ 6- pm

Did he pick up information flyer?
____ yes ____ no

Was viewer interviewed?
____ yes ____ no

****

VIEWING BEHAVIOR:

Time -- Minutes/Seconds per Panel

Left	Center	Right

REMARKS: _____

_____

_____

_____

(if needed, continue on back)

****

1. Did you know about this Method before coming here today?
   _____ yes
   _____ no (If no, go to Question 8)

2. Did you seek information about this Method before coming here today?
   _____ yes _____ no

3. Had you every considered using this Method before coming here today?
   _____ yes, as presented here
   _____ some part(s) of Method presented here. Specify:

   _____ no

4. Has anyone in your school tried this Method?
   _____ yes, as presented here
   _____ some part(s) of it. Specify:

   _____ no

5. Is this method now being used in your school?
   _____ yes
   _____ some part(s) of it. Specify:

   _____ no

6. Is this Method now being used in any other school in your system?
   _____ yes, as presented here.
   _____ some part(s) of it. Specify:

   _____ no

7. Has anyone in your school system considered using this Method then decided against:
   a. Trying it?
   _____ yes _____ no
   b. Continued use of it after trial?
   _____ yes _____ no

8. What's your position in the school system?
   _____ Teacher of _____
   _____ Department head for _____
   _____ Principal
   _____ Assistant Superintendent for _____
   _____ Superintendent
   _____ Other (Specify):

Respondent's Name _____

Address _____

_____

Telephone No. _____

EXHIBIT OBSERVATION RECORD Form A

Display Title _____

Name of Observer _____ Subject Number _____

Location _____ Did he come alone? _____

Date _____ With company? _____ (Number)

Time of Day _____ 8-10 am
_____ 10-12 am
_____ 12-2 pm
_____ 2-4 pm
_____ 4-6 pm
_____ 6- pm

Did he pick up information flyer?
____ yes ____ no

Was viewer interviewed?
____ yes ____ no

****

VIEWING BEHAVIOR:

Time -- Minutes/Seconds per Panel

Left	Center	Right

REMARKS: _____

_____

_____

_____

(if needed, continue on back)

****

1. Did you know about this Method before coming here today?
   _____ yes
   _____ no (If no, go to Question 8)

2. Did you seek information about this Method before coming here today?
   _____ yes _____ no

3. Had you every considered using this Method before coming here today?
   _____ yes, as presented here
   _____ some part(s) of Method presented here. Specify:
   _____ no

4. Has anyone in your school tried this Method?
   _____ yes, as presented here
   _____ some part(s) of it. Specify:
   _____ no

5. Is this method now being used in your school?
   _____ yes
   _____ some part(s) of it. Specify:
   _____ no

6. Is this Method now being used in any other school in your system?
   _____ yes, as presented here.
   _____ some part(s) of it. Specify:
   _____ no

7. Has anyone in your school system considered using this Method then decided against:
   a. Trying it?
   _____ yes _____ no
   b. Continued use of it after trial?
   _____ yes _____ no

8. What's your position in the school system?
   ____ Teacher of _____
   ____ Department head for _____
   ____ Principal
   ____ Assistant Superintendent for _____
   ____ Superintendent
   ____ Other (Specify):

Respondent's Name _____

Address _____

_____

Telephone No. _____

NCEC EDUCATIONAL PRODUCTS DISPLAY

On-Site Interview Schedule

9. (a) How many pupils in your school system?

____ 1-299	____ 2,500-4,999
____ 300-599	____ 5,000-9,999
____ 600-999	____ 10,000-24,999
____ 1,000-2,499	____ 25,000-99,999
	____ 100,000 and over

(NOTE: Ask only of teachers and building principals:)

(b) How many pupils in your building? _____ _____

10. What impact, if any, do you feel this Display has had on your thinking or actions regarding the teaching Method presented? (Check as many as apply.)

____ Made me want to get more information about this Method.

____ Made me think about trying some new approaches.

____ Made me want to discuss this Method with my colleagues.

____ Made me think about substituting parts of this Method for what I'm now doing.

____ Made me think about substituting this complete Method for what I'm now doing.

____ Made me want to recommend this Method for trial in our school system.

____ Made me want to recommend this Method for use in our school system.

____ Made me want to recommend rejection of this Method for our school system.

____ Convinced me to try parts of this Method.

____ Convinced me to try this Method on a full-scale basis.

____ Convinced me to use parts of this Method on a continuing basis.

____ Convinced me to use this complete Method on a continuing basis.

____ Convinced me to reject use of this Method on any basis.

____ Let me see that what I'm already doing is the same as this Method.

11. What kinds of information in the Displays did you find most valuable to you? (Check as many as apply.)

____ Effect on students' learning

____ Cost of materials

____ How to use Method

____ Underlying principles

____ Materials required

____ Staffing requirements

____ Interest of students in Method

____ Other (Specify): _____

12. Now, I'd like you to look at this set of scales and give me the number that best expresses your rating of _____ (Method) on each of the dimensions.

Useful	+2	+1	0	-1	-2	Worthless
Practical	+2	+1	0	-1	-2	Impractical
New	+2	+1	0	-1	-2	Out-of-date
Exciting	+2	+1	0	-1	-2	Dull
Better than present method	+2	+1	0	-1	-2	Worse than present method

13. Did this Display give you enough information to help you in evaluating its appropriateness for your school?

(a) ____ yes ____ no

(b) If yes, what kind of information helped you most?

(c) If no, what additional information would you like?

14. Did this Display make you want to get more information?

_____ yes If yes, what information would you want?

_____ no

15. If you wanted more information about this Method, how would you go about getting it?

16. (a) How did you feel about the Display in general?

(b) What about it made you feel that way?

17. (a) What did you like most about the Display?

(b) Is there anything else you liked about it?

18. (a) What did you like least about the Display?

(b) Is there anything else?

19. What could have been done to make the Display more useful to you?

20. (a) Have you been to the consulting session on this Method?

_____ yes _____ no

(b) Do you plan to attend it?

_____ yes _____ no

21. How did you find out about the Displays which are here today?

22. What kinds of information about this Method had you received prior to visiting the Display today?

_____ Effect on students' learning

_____ Cost of materials

_____ How to use Method

_____ Underlying principles

_____ Materials required

_____ Staffing requirements

_____ Interest of students in Method

_____ Other (Specify):

23. Has visiting this Display had any impact on your feelings about NIE/HEW?

____ yes If yes, what impact?

____ no

24. Any other comments?

(NOTE: For those who knew about this Method before coming to this exhibit)

25. From what sources had you received information about this Method before coming here today?

____ Read about it in _____

____ Talked to _____ about it.

____ Attended meeting about it _____
(Type and location)

____ Saw it being used at _____

____ Heard about it via _____

____ Saw movie about it

____ Saw TV show about it

Thank you for your help. We want to send you a short followup questionnaire in four to six weeks for you to complete and return.

USOE EDUCATIONAL PRODUCTS DISPLAY
Followup Questionnaire

1. How many years have you been connected with the present school system?

(1) ___ 1-2 years (4) ___ 11-15 years (7) ___ 26 or more years

(2) ___ 3-5 years (5) ___ 16-20 years

(3) ___ 6-10 years (6) ___ 21-25 years

2. How many years have you taught school?

(0) ___ none (3) ___ 6-10 years (6) 21-25 years

(1) ___ 1-2 years (4) ___ 11-15 years (7) 26 or more years

(2) ___ 3-5 years (5) ___ 16-20 years

3. How many years have you served as a school administrator?

(0) ___ none (3) ___ 6-10 years (6) ___ 21-25 years

(1) ___ 1-2 years (4) ___ 11-15 years (7) ___ 26 or more years

(2) ___ 3-5 years (5) ___ 16-20 years

4. What is the highest degree you have completed?

(1) ___ less than a B.A. (4) ___ Ed D. or Ed Specialist (6) ___ Post Doctoral

(2) ___ B.A. (7) ___ other _____

(5) ___ Ph.D.

(3) ___ M.A.

5. During the past three years, how many courses have you taken beyond the last degree you received?

(0) ___ none (2) ___ 3-5 (4) ___ 11-15

(1) ___ 1-2 (3) ___ 6-10 (5) ___ 16 or more

6. In addition to seeing the Display, did you also attend the consulting session on this teaching method?

(1) ___ no

(2) ___ yes

7. How convenient is it for you or others on your staff to visit a university staff member?

(1) ___ Very convenient
(2) ___ Fairly convenient
(3) ___ Fairly difficult
(4) ___ Very difficult

8. How frequently do you or any of your colleagues contact a university staff member?

(1) ___ less than once a year
(2) ___ 1-5 times a year
(3) ___ 6-11 times a year
(4) ___ 1-3 times a month
(5) ___ once a week or more

9. How many different conferences and/or professional meetings outside of your school district have you attended within the last 12 months?

a. ___ none
b. ___ one
c. ___ 2-3
d. ___ 4-5
e. ___ more than 5

10. How many conferences, workshops, or other meetings pertaining to teaching in your area of interest have you attended within your school district during the past year?

(0) ___ none
(1) ___ one
(2) ___ 2-3
(3) ___ 4-5
(4) ___ 6-10
(5) ___ 11-15
(6) ___ 16 or more

What would you estimate is your frequency of communication about educational programs with staff in other school systems that are:

11. More than 100 miles away?

(0) ___ no answer
(1) ___ less than once a year
(2) ___ 1-5 times a year
(3) ___ 6-10 times a year
(4) ___ 1-3 times a month
(5) ___ One or more times per week

What would you estimate is your frequency of communication about educational programs with staff in other school systems that are:

12. More than 15 miles but less than 100 miles away?

(0) ___ no answer
(1) ___ less than once a year
(2) ___ 1-5 times a year
(3) ___ 6-10 times a year
(4) ___ 1-3 times a month
(5) ___ One or more times a week

13. Less than 15 miles away?

(0) ___ no answer
(1) ___ less than once a year
(2) ___ 1-5 times a year
(3) ___ 6-10 times a year
(4) ___ 1-3 times a month
(5) ___ One or more times a week

14. In what publications, if any, have you read about this teaching method?

(1) ___ none
(2) ___ Professional journals
(3) ___ Bulletins, pamphlets
(4) ___ Popular magazines
(5) ___ Popular books
(6) ___ Other _____

15. When it comes to trying new instructional programs, my school system tends to be:

(1) ___ among the last
(2) ___ somewhat later than most
(3) ___ average
(4) ___ somewhat earlier than most
(5) ___ among the first

HAS YOUR VISIT TO THE EDUCATIONAL PRODUCTS DISPLAY HAD ANY OF THE FOLLOWING EFFECTS?:

(Please check as many as apply)

____ (1) Sought more information about the method (articles, journals, other people).

____ (2) Discussed the method with my colleagues.

____ (3) Recommended trying the method as shown in the Display, or any form or part of the method.

____ (4a) Tried using parts of the method.

____ (4b) Tried using the complete method.

____ (5a) Have adopted a program for continued use with parts of the method.

____ (5b) Have adopted a program for continued use with the complete method.

____ (6) Have decided against using the method or any part of it.

WHAT SOURCES OF INFORMATION DID YOU FIND MOST USEFUL IN MAKING YOUR DECISION ABOUT THIS METHOD OR PARTS OF THIS METHOD? BE AS SPECIFIC AS POSSIBLE ABOUT THE SOURCES AND THE INFORMATION FROM THESE SOURCES.

EDUCATIONAL PRODUCTS CONSULTING SESSION
(Feedback)

We'd like your reactions to this consulting session and to the teaching Method discussed. Please use the special scoring pencils to mark your replies on the answer sheet. PLEASE DO NOT MARK ON THIS FORM.

Numbers in parentheses are codes to use in recording your responses on the self scoring sheet. For example, on question 1 below, if you feel the session was very useful, you would want to mark 4 on your scoring sheet. If, on the other hand, you felt it was completely worthless, you would score 0. If your feelings were somewhere in between, you would score one of the numbers between, and so on for each question.

When you leave the session, hand both the answer sheet and this form to the person at the door.

A. Please rate the session just attended on each of the five scales below. The nearer your mark is to one of the descriptions (on either the right or left end of each scale) the better that word describes this session.

		-2	-1	0	+1	+2	
1.	worthless	(0)	(1)	(2)	(3)	(4)	useful
2.	boring	(0)	(1)	(2)	(3)	(4)	interesting
3.	not informative	(0)	(1)	(2)	(3)	(4)	informative
4.	dull	(0)	(1)	(2)	(3)	(4)	exciting
5.	out-of-date	(0)	(1)	(2)	(3)	(4)	up-to-date

B. Continue by marking the correct box on the answer sheet to record your reply to the following questions:

6. What was your general reaction to this consulting session?
(0) positive (1) neutral (2) negative

7. Is the Method covered in this consulting session one that is suitable for use in your school system? (0) yes (1) no

8. Did you see the audiovisual display on this education Method before coming to this consulting session? (0) yes (1) no

9. Did you know about this Method before coming here today?
(0) yes (1) no (If no, go to item 12).

10. Did you seek information about this Method before coming here today?
(0) yes (1) no

11. At my school, this new Method:

(0) is being used in full.

(1) is being used in part.

(2) is being considered but has not yet been tried.

(3) has been rejected without being tried.

(4) has been tried and discontinued.

(5) has not been considered for use.

C. What impact, if any, do you feel this Display has had on your thinking or action regarding the teaching Method presented?

Yes	No		
(0)	(1)	12.	Made me want to get more information about this Method.
(0)	(1)	13.	Made me think about trying some new approaches.
(0)	(1)	14.	Made me want to discuss this Method with my colleagues.
(0)	(1)	15.	Made me think about substituting parts of this Method for what I'm now doing.
(0)	(1)	16.	Made me think about substituting this complete Method for what I'm now doing.
(0)	(1)	17.	Made me want to recommend this Method for trial in our school system.
(0)	(1)	18.	Made me want to recommend this Method for use in our school system.
(0)	(1)	19.	Made me want to recommend rejection of this Method for our school system.
(0)	(1)	20.	Convinced me to try parts of this Method.
(0)	(1)	21.	Convinced me to try this Method as presented on a full-scale basis.
(0)	(1)	22.	Convinced me to use parts of this Method on a continuing basis.
	(1)	23.	Convinced me to use this complete Method on a continuing basis.
(0)	(1)	24.	Convinced me to reject use of this Method on any basis.
(0)	(1)	25.	Let me see that what I'm already doing is the same as this Method.

D. Did this session provide you with sufficient information in the following areas?

		Too much	About right	Not enough
26.	Effect on students' learning	(0)	(1)	(2)
27.	Cost of materials	(0)	(1)	(2)
28.	How to use Method	(0)	(1)	(2)
29.	Underlying principles	(0)	(1)	(2)
30.	Materials required	(0)	(1)	(2)
31.	Staffing requirements	(0)	(1)	(2)
32.	Interest of students in Method	(0)	(1)	(2)

E. How important to you is information on the following areas in your evaluation of this product?

		Very important +2	+1	Neutral 0	-1	Not at all important -2
33.	Effect on students' learning	(0)	(1)	(2)	(3)	(4)
34.	Cost of materials	(0)	(1)	(2)	(3)	(4)
35.	How to use Method	(0)	(1)	(2)	(3)	(4)
36.	Underlying principles	(0)	(1)	(2)	(3)	(4)
37.	Materials required	(0)	(1)	(2)	(3)	(4)
38.	Staffing requirements	(0)	(1)	(2)	(3)	(4)
39.	Interest in students in Method	(0)	(1)	(2)	(3)	(4)

F. 40. Please indicate the number of pupils in your school system (district).

(0) 0-299	(3) 1,000-2,499	(6) 10,000-24,999
(1) 300-599	(4) 2,500-4,999	(7) 25,000-99,999
(2) 600-999	(5) 5,000-9,999	(8) 100,000 and over

Please write any other comments you may have on the back of the answer sheet.

SURVEY OF AWARENESS OF TEN EDUCATIONAL DISPLAYS

1. Have you heard about the displays mentioned in the accompanying letter?

   YES _____

   NO _____ (If no, go to question #5)

2. Have you visited any of the display sites?

   YES _____ If yes, which ones? _____

   NO _____

3. Do you know of anyone else in your school system who visited any of the display sites?

   YES _____ If yes, which sites? _____

   NO _____

4. How did you first find out about these displays?

5. How would you usually find out about new teaching approaches such as these?

6. Whether you have known about the Displays or not, we would like to know how many of these ten programs you've heard about. Check "yes" for each program you know about and "no" for each one you don't know about.

	YES	NO	
a.	___	___	Individually Guided Education in the Multiunit Elementary Schools
b.	___	___	MATCH units
c.	___	___	Home Oriented Early Childhood Education
d.	___	___	The Minicourse on Effective Questioning
e.	___	___	First Year Communication Skills Program
f.	___	___	Comprehensive School Mathematics Program
g.	___	___	Adult Basic Education
h.	___	___	Cooperative Urban Teaching Education
i.	___	___	Reinforced Readiness Requisites
j.	___	___	Patterns in Arithmetics

7. For each item you marked "yes" in question 6, please indicate how you first heard about the program. (Use back of sheet if needed)

EDUCATIONAL PRODUCTS DISPLAYS

Instruction to Observer-Interviewers

You are assigned to the Display for which we are collecting data on time spent viewing the Display, adoption stage for the Method and reactions to the Display and the Method.

Use a stopwatch to record the amount of time a subject spends viewing the right, center, and left panels of the Display to which you are assigned. Record the viewing times in the appropriate boxes on Form A. In the "Remarks" section, you should note special behaviors, e.g., number of times listened to the recording, talking with others, note-taking, etc.

Following this, approach the subject and use the following statement:

"Hello. I'm (your name) with Michigan State University. I saw you looking at the Display on _____. As part of an evaluation study, we'd like to get some reactions of teachers and school administrators regarding the Display and the Method covered in the Display."

1. "Are you a teacher, curriculum coordinator or school administrator?"

   ____ Yes (If yes, continue interview.)

   ____ No (If no, thank them and discontinue questioning, saying you hope they enjoy the Displays.)

2. "Is this Method in a content area which is related to your duties in your class or your school system?"

   ____ Yes (If yes, continue the interview with statement below.)

   ____ No (If no, thank them and discontinue questioning, saying you hope they enjoy the Displays.)

"I'd like to talk with you a few minutes to get some of your reactions to this Display and this Method of teaching. Your name and the name of your school will not be linked with any of your responses."

NOW, CONTINUE WITH FOLLOW-UP QUESTIONS 1 - 8 ON FORM A.

EDUCATIONAL PRODUCTS DISPLAYS

Instruction to Observers

You are assigned to the Display for which we will collect data only on time spent viewing the Display and the adoption stage for the Method.

Use a stopwatch to record the amount of time a subject spends viewing the right, center, and left panels of the display to which you are assigned. Record the viewing times in the appropriate boxes on Form A. In the "Remarks" section, you should note any special behaviors, e.g., number of times spent listening to the recording, talking with others, note-taking, etc.

Following this, approach the subject and use the following statement:

"Hello. I'm (your name) with Michigan State University. I saw you looking at the Display on _____. As part of an evaluation study, we'd like to get some information from teachers and school administrators regarding use of the Method covered in the Display."

1. "Are you a teacher, curriculum coordinator, or school administrator?"

   ____ Yes (If yes, continue with questions.)

   ____ No (If no, thank them and discontinue questioning, saying you hope they enjoy the Displays.)

2. "Is this Method in a content area which is related to your duties in your class or school system?"

   ____ Yes (If yes, continue with follow-up questions 1 - 8 on the bottom of the observation form.)

   ____ No (If no, thank them and discontinue questioning, saying you hope they enjoy the Displays.)

EDUCATIONAL PRODUCTS DISPLAY

Introducing the Feedback Form

In our teaching, we often say we would like some feedback from those with whom we've been working. A team from Michigan State University and I would like some feedback from you on this session which we're just completing.

We want to find out a bit about:

1. Your reactions to this session;
2. Where you were before today in knowing about and using this method;
3. What impact you feel this session had on your thinking about or plans for the use of this method;
4. How the content covered fits with what you feel you need.

While the options available for you to check cover 3 double-spaced pages, you should be able to complete them in about five minutes. We hope you will respond conscientiously and quickly to each item.

The numbers along the side identify the item number to use on the answer sheet, and the numbers in parenthesis match the number of the box for each item. Some items have five options -- 0 - 1 - 2 - 3 or 4; others have only two options -- 0 or 1. Use the special pencil we're giving you to fill in the box completely for the response which best expresses where you stand on that item.

E.g., On item #1, if you felt this session was very useful you would fill in box "4"; if you felt the session was very worthless for you, you would fill in the "0" box, and so on for the levels of usefulness in-between, with box 2 being kind of in-between useful and worthless.

As you finish, please leave the yellow question forms, the answer sheets and the pencils on the table or chair by the door.

Finally, we'd like you to write your name and school on the edge of the answer sheet. This will be matched up with the interview form, in case some of you get interviewed later. Your responses will not be tied to your name or school in any report or other use of the data.

Thank you in advance for your help!

APPENDIX B

Feedback From Consulting Sessions

For Comprehensive School Math -- B-1 to B-7

For Individually Guided Education in Multi-Unit Schools -- B-8 to B-14

For Mini-Course on Effective Questioning -- B-15 to B-21

For First Year Communication Skills -- B-22 to B-28

Impact of Consulting Sessions Reported by Site and by Topic -- B-29 to B-32

APPENDIX B

Feedback From the Consulting Sessions on the Comprehensive School Mathematics Program*

Table No. B-1

Respondents rated the consulting session they had just attended on a five point scale on each of the sets of polar adjectives listed below. A positive number indicates how far above neutral the average respondent rated the session. There were no mean values below zero. The scale ranged from -2 to +2.

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Worthless - Useful	1.74	1.57	1.17	1.48
Boring - Interesting	1.65	1.29	1.07	1.67
Not Informative - Informative	1.55	1.55	1.24	1.67
Dull - Exciting	1.26	1.40	0.67	1.52
Out-of-Date - Up-to-Date	1.63	1.86	1.58	1.66

Table No. B-2

Respondents "general reaction to the consulting session." Reported in percentages of respondents in each group.**

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Positive	83.9	75	74.1	88.2
Neutral	6.5	3.6	9.3	0
Negative	3.2	17.9	16.7	11.8
No Answer	6.5	3.6	0	0

*Data were gathered at Methuen, Massachusetts (Total N=31), Boise, Idaho (Total N=28), Cambridge, Massachusetts (Total N=54), and Hamilton, Montana (Total N=34).

**Except where otherwise noted, the remaining results will be reported as the number and percentages of respondents in each group. For items where percentages total less than 100%, data are missing.

Table B-3

Respondents evaluation of the suitableness of the Comprehensive School Math program for use in their own school system.

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Suitable	83.9	78.6	70.4	67.6
Not Suitable	12.9	14.3	7.4	26.5
No Answer	3.2	7.1	22.2	5.9

Table B-4

Respondents were asked if they had seen the audiovisual display on Comprehensive School Math program before coming to the consulting session.

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Yes	12.9	25.0	13.0	44.1
No	87.1	60.7	87.0	55.9
No Answer	0	14.3	0	0

Table B-5

Respondents were asked if the audiovisual display had influenced their decision to come to the consulting session.

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Yes	9.7	14.3	*	*
No	16.1	28.6	*	*
No Answer	74.2	57.1	*	*

*Data on this question were not obtained at this site.

Table B-6

Respondents were asked if they had known about the Comprehensive School Math method before coming to the consulting session.

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Yes	22.6	14.3	25.9	17.6
No	74.2	67.9	70.4	79.4
No Answer	3.2	17.8	3.7	3.0

Table B-7

Respondents who answered "yes" to question B-6 were asked: "Did you seek information about this method before coming here today?"

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Yes	3.2	3.6	13.0	8.8
No Answer	96.8	96.4	87.0	91.2

Table B-8

Respondents who answered "yes" to question B-6 were asked: "Had you ever considered using this method before coming here today?"

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Yes	16.5	3.6	*	*
Some parts of it	19.4	14.3	*	*
No	6.5	32.1	*	*
No Answer	57.6	50.0	*	*

*Data on this question were not obtained at this site.

Table B-9

Respondents who answered "yes" to question B-6 were asked: "Has anyone in your school tried this method?"

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Yes	6.5	0	*	*
Some parts of it	12.9	10.7	*	*
No	19.4	39.3	*	*
No Answer	61.2	50.0	*	*

Table B-10

Respondents who answered "yes" to question B-6 were asked: "Is this method now being used in your school?"

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Yes	0	0	*	*
Some parts of it	19.4	10.7	*	*
No	22.6	35.7	*	*
No Answer	58.0	53.6	*	*

Table B-11

Respondents who answered "yes" to question B-6 were asked: "Is this method now being used in any other school in your system?"

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Yes	0	0	*	*
Some parts of it	12.9	25.0	*	*
No	12.9	17.9	*	*
No Answer	74.2	57.1	*	*

*Data on this question were not obtained at this site.

Table B-12

Respondents were asked what impact the consulting session had on their thinking regarding the Comprehensive School Math (CSM) program. (Figures indicate "yes" responses to each item.)

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
The session made me:				
Want to get more information	77.4	78.6	87.0	82.4
Think about trying new approaches	93.5	78.6	79.6	85.3
Want to discuss CSM with colleagues	83.9	64.3	75.9	91.2
Think about adopting parts of CSM	83.9	71.4	74.1	79.4
Think about adopting complete CSM	6.5	10.7	20.4	20.6
Want to recommend CSM for trial	61.3	60.7	61.1	67.6
Want to recommend CSM for use	22.6	39.3	35.2	44.1
Want to recommend rejection of CSM	0	0	11.1	11.8
The session convinced me to:				
Try parts of CSM	83.9	67.9	77.8	82.4
Try CSM on full scale basis	6.5	10.7	31.5	17.6
Use parts of CSM continually	77.4	53.6	59.3	52.9
Use complete CSM continually	6.5	14.3	16.7	8.8
Reject CSM entirely	3.2	3.6	11.1	14.7
What I am doing is same as CSM	22.6	14.3	16.7	11.8

Table B-13

Respondents were asked if the consulting session provided them with sufficient information in the following areas:

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Effect on student's learning:				
Too Much	6.5	0	1.9	2.9
About Right	77.4	25.0	44.4	70.6
Not Enough	9.7	42.9	53.7	23.5
Cost of materials:				
Too Much	9.7	3.6	3.7	5.9
About Right	45.2	14.3	9.3	47.1
Not Enough	32.3	50.0	83.3	41.2
How to use metnod:				
Too Much	0	7.1	7.4	5.9
About Right	74.2	42.9	61.1	88.2
Not Enough	16.1	17.9	31.5	5.9
Underlying principles:				
Too Much	3.2	3.6	0	11.8
About Right	67.7	32.1	68.5	70.6
Not Enough	16.1	32.1	29.6	14.7
Materials required:				
Too Much	3.2	10.7	0	11.8
About Right	71.0	42.9	61.1	55.9
Not Enough	16.1	17.9	38.9	32.4
Staffing requirements:				
Too Much	0	10.7	1.9	8.8
About Right	41.9	32.1	33.3	55.9
Not Enough	35.5	25.0	64.8	29.4
Interest of students in CSM:				
Too Much	3.2	3.6	3.7	8.8
About Right	67.7	42.9	64.8	79.4
Not Enough	16.1	25.0	31.5	8.8

Table B-14

Respondents rated the importance of information provided at the consulting sessions on a five point scale for each of seven topics. A positive number indicates how far above neutral in importance the average respondent considered the different types of information. There were no mean values below zero. The scale ranged from -2 to +2.

	Methuen N=31	Boise N=28	Cambridge N=54	Hamilton N=34
Effect on students' learning	1.71	1.65	1.80	1.39
Cost of materials	1.5	1.00	.78	.69
How to use method	1.64	1.68	1.48	1.30
Underlying principles	1.59	1.32	1.63	1.18
Materials required	1.54	1.32	0.98	.91
Staffing requirements	1.08	1.00	.72	.67
Interest of students in CSM	1.73	1.63	1.72	1.55

Feedback From the Consulting Sessions on the
Individually Guided Education Program*

Table B-15

Respondents rated the consulting session they had just attended on a five point scale on each of the sets of polar adjectives listed below. A positive number indicates how far above neutral the average respondent rated the session. There were no mean values below zero. The scale ranged from -2 to +2.

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Worthless - Useful	.84	.61	1.29	1.14
Boring - Interesting	.92	.37	1.14	1.37
Not Informative - Informative	1.17	.83	1.14	1.34
Dull - Exciting	.28	.10	.43	.84
Out-of-Date - Up-to-Date	1.46	.93	1.43	1.46

Table B-16

Respondents "general reaction to the consulting session." Reported in percentages of respondents in each group.**

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Positive	48.6	45.0	57.9	75.0
Neutral	8.1	8.3	0	2.6
Negative	40.5	30.0	42.9	19.7
No Answer	2.8	16.7	.8	2.7

*Data were gathered at Methuen, Massachusetts (Total N=37), Boise, Idaho (Total N=60), Cambridge, Massachusetts (Total N=7), and Hamilton, Montana (Total N=76).

**Except where otherwise noted, the remaining results will be reported as the number and percentages of respondents in each group. For items where percentages total less than 100%, data are missing.

Table B-17

Respondents evaluation of the suitableness of the Individually Guided Education program for use in their own school system.

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Suitable	67.6	50.0	57.1	61.3
Not Suitable	27.0	33.3	14.3	35.5
No Answer	5.4	16.7	28.6	2.7

Table B-18

Respondents were asked if they had seen the audiovisual display on Individually Guided Education program before coming to the consulting session.

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Yes	45.9	11.7	28.6	43.4
No	51.4	75.0	71.4	55.3
No Answer	2.7	13.3	0	1.3

Table B-19

Respondents were asked if the audiovisual display had influenced their decision to come to the consulting session.

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Yes	13.5	20.0	*	*
No	37.8	13.3	*	*
No Answer	48.7	66.7	*	*

*Data on this question were not obtained at this site.

Table B-20

Respondents were asked if they had known about the Individually Guided Education method before coming to the consulting session.

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Yes	64.9	38.3	57.1	56.6
No	29.7	40.0	28.6	40.8
No Answer	5.4	21.7		

Table B-21

Respondents who answered "yes" to question B-20 were asked: "Did you seek information about this method before coming here today?"

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Yes	45.9	21.7	28.6	31.6
No Answer	54.1	78.3	71.4	68.4

Table B-22

Respondents who answered "yes" to question B-20 were asked: "Had you ever considered using this method before coming here today?"

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Yes	21.6	16.7	*	*
Some parts of it	35.1	23.3	*	*
No	21.6	13.3	*	*
No Answer	21.6	46.7	*	*

*Data on this question were not obtained at this site.

Table B-23

Respondents who answered "yes" to question B-20 were asked: "Has anyone in your school tried this method?"

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Yes	5.4	11.7	*	*
Some parts of it	35.1	21.7	*	*
No	40.5	21.7	*	*
No Answer	19.0	44.9	*	*

Table B-24

Respondents who answered "yes" to question B-20 were asked: "Is this method now being used in your school?"

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Yes	5.4	6.7	*	*
Some parts of it	27.0	20.0	*	*
No	51.4	25.0	*	*
No Answer	16.2	48.3	*	*

Table B-25

Respondents who answered "yes" to question B-20 were asked: "Is this method now being used in any other school in your system?"

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Yes	62.2	20.0	*	*
Some parts of it	8.1	15.0	*	*
No	10.8	13.3	*	*
No Answer	18.9	51.7	*	*

*Data on this question were not obtained at this site.

Table B-26

Respondents were asked what impact the consulting session had on their thinking regarding the Individually Guided Education (IGE) program. (Figures indicate "yes" responses to each item).

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N-76
The session made me:				
Want to get more information	67.6	50.0	71.4	63.2
Think about trying new approaches	70.3	60.0	57.1	73.7
Want to discuss IGE with colleagues	73.0	58.3	85.7	75.0
Think about adopting parts of IGE	67.6	58.3	57.1	65.8
Think about adopting complete IGE	18.9	18.3	0	17.1
Want to recommend IGE for trial	32.4	41.7	71.4	47.4
Want to recommend IGE for use	24.3	31.7	42.9	31.6
Want to recommend rejection of IGE	5.4	15.0	14.3	15.8
The session convinced me to:				
Try parts of IGE	62.2	53.3	71.4	71.1
Try IGE on full scale basis	18.9	13.3	14.3	15.8
Use parts of IGE continually	45.9	35.0	85.7	60.5
Use complete IGE continually	13.5	11.7	14.3	18.4
Reject IGE entirely	10.8	11.7	28.6	3.9
What I am doing is same as IGE	29.7	21.7	42.9	35.5

Table B-27

Respondents were asked if the consulting session provided them with sufficient information in the following areas:

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Effect on student's learning:				
Too Much	2.7	0	0	1.3
About Right	51.4	23.3	57.1	32.9
Not Enough	45.9	50.0	42.9	53.9
Cost of materials:				
Too Much	2.7	1.7	0	7.9
About Right	21.6	13.3	57.1	18.4
Not Enough	75.7	56.7	42.9	60.5
How to use method:				
Too Much	5.4	1.7	0	3.9
About Right	48.6	38.3	42.9	48.7
Not Enough	45.9	33.3	42.9	35.5
Underlying principles:				
Too Much	5.4	3.3	14.3	6.6
About Right	73.0	45.0	42.9	63.2
Not Enough	21.6	25.0	28.6	17.1
Materials required:				
Too Much	0	1.7	14.3	6.6
About Right	32.4	16.7	57.1	27.6
Not Enough	67.6	50.0	28.6	52.6
Staffing requirements:				
Too Much	5.4	3.3	0	6.6
About Right	78.4	38.3	71.4	56.6
Not Enough	16.2	28.3	28.6	22.4
Interest of students in IGE:				
Too Much	0	1.7	0	3.9
About Right	56.8	16.7	42.9	23.7
Not Enough	43.2	51.7	57.1	57.9

Table B-28

Respondents rated the importance of information provided at the consulting sessions on a five point scale for each of seven topics. A positive number indicates how far above neutral in importance the average respondent considered the different types of information. There were no mean values below zero. The scale ranged from -2 to +2.

	Methuen N=37	Boise N=60	Cambridge N=7	Hamilton N=76
Effect on students' learning	.54	1.24	1.83	1.52
Cost of materials	.53	.77	1.5	.92
How to use method	.53	1.14	1.5	1.38
Underlying principles	.66	.93	1.67	1.18
Materials required	.58	1.0	.83	.81
Staffing requirements	.67	1.0	1.33	1.06
Interest of students in IGE	.68	1.11	1.5	1.26

Feedback From the Consulting Sessions on the
Mini-Course on Effective Questioning Program*

Table B-29

Respondents rated the consulting session they had just attended on a five point scale on each of the sets of polar adjectives listed below. A positive number indicates how far above neutral the average respondent rated the session. There were no mean values below zero. The scale ranged from -2 to +2.

	Methuen N=31	Boise N=99	Hamilton N=60
Worthless - Useful	?	1.05	.72
Boring - Interesting	1.03	.96	.78
Not Informative - Informative	1.25	1.13	.89
Dull - Exciting	.34	.51	.74
Out-of-Date - Up-to-Date	1.31	1.34	.93

Table B-30

Respondents "general reaction to the consulting session." Reported in percentages of respondents in each group.**

	Methuen N=31	Boise N=99	Hamilton N=60
Positive	45.2	65.7	50.0
Neutral	6.5	6.1	8.3
Negative	41.9	27.3	38.3
No Answer	6.4	.9	3.4

*Data were gathered in Methuen, Massachusetts (Total N=31), Boise, Idaho (Total N=99), and Hamilton, Montana (Total N=60).

**Except where otherwise noted, the remaining results will be reported as the number and percentages of respondents in each group. For items where percentages total less than 100%, data are missing.

Table B-31

Respondents evaluation of the suitableness of the Mini-Course on Effective Questioning program for use in their own school system.

	Methuen N=31	Boise N=99	Hamilton N=60
Suitable	71.0	76.8	61.7
Not Suitable	19.4	20.2	35.0
No Answer	9.6	3.0	3.3

Table B-32

Respondents were asked if they had seen the audiovisual display on Mini-Course on Effective Questioning program before coming to the consulting session.

	Methuen N=31	Boise N=99	Hamilton N=60
Yes	45.2	14.1	38.3
No	48.4	85.9	61.7
No Answer	6.4	0	0

Table B-33

Respondents were asked if the audiovisual display had influenced their decision to come to the consulting session.

	Methuen N=31	Boise N=99	Hamilton N=60
Yes	19.4	13.1	*
No	35.5	26.3	*
No Answer	45.1	60.6	*

*Data on this question were not obtained at this site.

Table B-34

Respondents were asked if they had known about the Mini-Course on Effective Questioning method before coming to the consulting session.

	Methuen N=31	Boise N=99	Hamilton N=60
Yes	16.1	51.5	40.0
No	80.6	41.4	56.7
No Answer	3.3	7.1	3.3

Table B-35

Respondents who answered "yes" to question B-34 were asked: "Did you seek information about this method before coming here today?"

	Methuen N=31	Boise N=99	Hamilton N=60
Yes	0	25.3	21.7
No Answer	48.4	37.4	36.6

Table B-36

Respondents who answered "yes" to question B-34 were asked: "Had you ever considered using this method before coming here today?"

	Methuen N=31	Boise N=99	Hamilton N=60
Yes	9.7	41.4	*
Some parts of it	12.9	17.2	*
No	35.5	7.1	*
No Answer	41.9	34.3	*

*Data on this question were not obtained at this site.

Table B-37

Respondents who answered "yes" to question B-34 were asked: "Has anyone in your school tried this method?"

	Methuen N=31	Boise N=99	Hamilton N=60
Yes	3.2	24.2	*
Some parts of it	6.5	24.2	*
No	32.3	14.1	*
No Answer	58.0	37.4	*

Table B-38

Respondents who answered "yes" to question B-34 were asked: "Is this method now being used in your school?"

	Methuen N=31	Boise N=99	Hamilton N=60
Yes	0	18.2	*
Some parts of it	9.7	28.3	*
No	32.3	16.2	*
No Answer	58.0	37.4	*

Table B-39

Respondents who answered "yes" to question B-34 were asked: "Is this method now being used in any other school in your system?"

	Methuen N=31	Boise N=99	Hamilton N=60
Yes	6.5	14.1	*
Some parts of it	9.7	32.3	*
No	25.8	13.1	*
No Answer	58.0	40.5	*

*Data on this question were not obtained at this site.

Table B-40

Respondents were asked what impact the consulting session had on their thinking regarding the Mini-Course on Effective Questioning (MEQ) program. (Figures indicate "yes" responses to each item).

	Methuen N=31	Boise N=99	Hamilton N=60
The session made me:			
Want to get more information	67.7	66.7	63.3
Think about trying new approaches	87.1	87.9	83.3
Want to discuss MEQ with colleagues	67.7	75.8	73.3
Think about adopting parts of MEQ	67.7	74.7	78.3
Think about adopting complete MEQ	29.0	23.2	15.0
Want to recommend MEQ for trial	32.3	63.6	53.3
Want to recommend MEQ for use	25.8	46.5	31.7
Want to recommend rejection of MEQ	9.7	16.2	10.0
The session convinced me to:			
Try parts of MEQ	64.5	76.8	76.7
Try MEQ on full scale basis	9.0	21.2	20.0
Use parts of MEQ continually	45.2	61.6	58.3
Use complete MEQ continually	29.0	20.2	13.3
Reject MEQ entirely	12.9	15.2	16.7
What I am doing is same as MEQ	41.9	57.6	40.0

Table B-41

Respondents were asked if the consulting session provided them with sufficient information in the following areas:

	Methuen N=31	Boise N=99	Hamilton N=60
Effect on student's learning:			
Too Much	6.5	2.0	0
About Right	54.8	29.3	50.0
Not Enough	25.8	60.6	46.7
Cost of materials:			
Too Much	19.4	10.1	15.0
About Right	67.7	6.1	10.0
Not Enough	3.2	71.7	71.7
How to use method:			
Too Much	16.1	6.1	5.0
About Right	58.1	56.6	66.7
Not Enough	12.9	27.3	23.3
Underlying principles:			
Too Much	12.9	2.0	3.3
About Right	67.7	51.5	71.7
Not Enough	6.5	33.3	20.0
Materials required:			
Too Much	0	10.1	3.3
About Right	77.4	45.5	73.3
Not Enough	6.5	31.3	18.3
Staffing requirements:			
Too Much	9.7	7.1	8.3
About Right	48.4	24.2	45.0
Not Enough	29.0	53.5	41.7
Interest of students in MEQ:			
Too Much	9.7	3.0	1.7
About Right	35.5	27.3	35.0
Not Enough	38.7	5	58.3

Table I-42

Respondents rated the importance of information provided at the consulting sessions on a five point scale for each of seven topics. A positive number indicates how far above neutral in importance the average respondent considered the different types of information. There were no mean values below zero. The scale ranged from -2 to +2.

	Methuen N=31	Boise N=99	Hamilton N=60
Effect on students' learning	1.42	1.41	1.40
Cost of materials	.88	1.19	.97
How to use method	1.33	1.21	1.10
Underlying principles	1.33	1.30	1.15
Materials required	1.17	1.26	89
Staffing requirements	1.29	1.12	1.05
Interest of students in MEQ	1.04	1.43	1.44

Feedback From the Consulting Sessions on the First Year Communication Skills Program*

Table B-43

Respondents rated the consulting session they had just attended on a five point scale on each of the sets of polar adjectives listed below. A positive number indicates how far above neutral the average respondent rated the session. There were no mean values below zero. The scale ranged from -2 to +2.

	Methuen N=16	Boise N=53
Worthless - Useful	.73	.82
Boring - Interesting	.80	.90
Not Informative - Informative	.73	1.04
Dull - Exciting	.27	.88
Out-of-Date - Up-to-Date	.93	.92

Table B-44

Respondents "general reaction to the consulting session." Reported in percentages of respondents in each group.**

	Methuen N=16	Boise N=53
Positive	43.8	52.8
Neutral	6.3	22.6
Negative	37.5	20.8
No Answer	12.4	3.8

*Data were gathered at Methuen, Massachusetts (Total N=16), and Boise, Idaho (Total N=53).

**Except where otherwise noted, the remaining results will be reported as the number and percentages of respondents in each group. For items where percentages total less than 100%, data are missing.

Table B-45

Respondents evaluation of the suitableness of the First Year Communication Skills program for use in their own school system.

	Methuen N=16	Boise N=53
Suitable	68.8	62.3
Not Suitable	12.5	30.2
No Answer	18.7	7.5

Table B-46

Respondents were asked if they had seen the audiovisual display on First Year Communication Skills program before coming to the consulting session.

	Methuen N=16	Boise N=53
Yes	43.8	15.1
No	37.5	83.0
No Answer	18.7	1.9

Table B-47

Respondents were asked if the audiovisual display had influenced their decision to come to the consulting session.

	Methuen N=16	Boise N=53
Yes	37.5	13.2
No	25.0	26.4
No Answer	37.5	60.4

Table B-48

Respondents were asked if they had known about the First Year Communication Skills method before coming to the consulting session.

	Methuen N=16	Boise N=53
Yes	12.5	20.8
No	62.5	66.0
No Answer	25.0	13.2

Table B-49

Respondents who answered "yes" to question B-48 were asked: "Did you seek information about this method before coming here today?"

	Methuen N=16	Boise N=53
Yes	6.3	7.5
No Answer	43.7	56.7

Table B-50

Respondents who answered "yes" to question B-48 were asked: "Had you ever considered using this method before coming here today?"

	Methuen N=16	Boise N=53
Yes	0	7.5
Some parts of it	18.8	11.3
No	37.5	24.5
No Answer	43.7	56.7

Table B-51

Respondents who answered "yes" to question B-48 were asked: "Has anyone in your school tried this method?"

	Methuen N=16	Boise N=53
Yes	0	5.7
Some parts of it	6.3	11.3
No	37.5	20.8
No Answer	56.2	62.2

Table B-52

Respondents who answered "yes" to question B-48 were asked: "Is this method now being used in your school:"

	Methuen N=16	Boise N=53
Yes	0	5.7
Some parts of it	6.3	9.4
No	43.8	22.6
No Answer	43.9	62.3

Table B-53

Respondents who answered "yes" to question B-48 were asked: "Is this method now being used in any other school in your system?"

	Methuen N=16	Boise N=53
Yes	6.3	5.7
Some parts of it	0	13.2
No	37.5	15.1
No Answer	56.2	66.0

Table B-54

Respondents were asked what impact the consulting session had on their thinking regarding the First Year Communication Skills (FYCS) program. (Figures indicate "yes" responses to each item.)

	Methuen N=16	Boise N=53
The session made me:		
Want to get more information	62.5	60.4
Think about trying new approaches	50.0	66.0
Want to discuss FYCS with colleagues	43.8	64.2
Think about adopting parts of FYCS	43.8	45.3
Think about adopting complete FYCS	6.3	22.6
Want to recommend FYCS for trial	37.5	54.7
Want to recommend FYCS for use	18.8	37.7
Want to recommend rejection of FYCS	0	17.0
The session convinced me to:		
Try parts of FYCS	50.0	58.5
Try FYCS on full scale basis	0	15.1
Use parts of FYCS continually	37.5	50.9
Use complete FYCS continually	12.5	11.3
Reject FYCS entirely	12.5	9.4
What I am doing is same as FYCS	25.0	26.4

Table B-55

Respondents were asked if the consulting session provided them with sufficient information in the following areas:

	Methuen N=16	Boise N=53
Effect on student's learning:		
Too Much	0	5.7
About Right	56.3	37.7
Not Enough	25.0	26.4
Cost of materials:		
Too Much	6.3	3.8
About Right	31.3	15.1
Not Enough	31.3	43.4
How to use method:		
Too Much	6.3	3.8
About Right	31.3	35.8
Not Enough	37.5	24.5
Underlying principles:		
Too Much	12.5	3.8
About Right	50.0	39.6
Not Enough	12.5	22.6
Materials required:		
Too Much	6.3	1.9
About Right	50.0	39.6
Not Enough	12.5	20.8
Staffing requirements:		
Too Much	18.3	1.9
About Right	25.0	32.1
Not Enough	25.0	28.3
Interest of students in FYCS:		
Too Much	12.5	1.9
About Right	50.0	45.3
Not Enough	6.3	17.0

Table B-56

Respondents rated the importance of information provided at the consulting sessions on a five point scale for each of seven topics. A positive number indicates how far above neutral in importance the average respondent considered the different types of information. There were no mean values below zero. The scale ranged from -2 to +2.

	Methuen N=16	Boise N=53
Effect on students' learning	1.20	1.61
Cost of materials	.89	.87
How to use method	1.56	1.52
Underlying principles	1.0	1.53
Materials required	1.44	1.50
Staffing requirements	.67	1.37
Interest of students in FYCS	1.44	1.66

Table B-57

Number of respondents per site, per topic used in computing percentages in Table B-58.

	Methuen N	Boise N	Cambridge N	Hamilton N
Comprehensive School Mathematics (CSM)*	31	28	54	34
Individually Guided Education (IGE)*	37	60	7	76
Mini-Course on Effective Questioning (MEQ)*	31	99	*	60
First Year Communication Skills (FYCS)*	16	53	*	*

*These abbreviations used in Table B-58 below.

Table B-58

Impact of consulting sessions reported by those attending and completing Feedback form by four topics and four sites.

	Methuen %	Boise %	Cambridge %	Hamilton %
THE SESSION MADE ME:				
Want to get more information				
CSM	77.4	78.6	87.0	82.4
IGE	67.6	50.0	71.4	63.2
MEQ	67.7	66.7	*	63.3
FYCS	62.5	60.4	*	*
Think about trying new approaches				
CSM	93.5	78.6	79.6	85.3
IGE	70.3	60.0	57.1	73.7
MEQ	87.1	87.9	*	83.3
FYCS	50.0	66.0	*	*

*Data on this method were not obtained at this site.

	Methuen %	Boise %	Cambridge %	Hamilton %
Want to discuss method with colleagues				
CSM	83.9	64.3	75.9	91.2
IGE	73.0	58.3	85.7	75.0
MEQ	67.7	75.8	*	73.3
FYCS	43.8	64.2	*	*
Think about adopting parts of method				
CSM	83.9	71.4	74.1	79.4
IGE	67.6	58.3	57.1	65.6
MEQ	67.7	74.7	*	78.3
FYCS	43.8	45.3	*	*
Think about adopting complete method				
CSM	6.5	10.7	20.4	20.6
IGE	18.9	18.3	0	17.1
MEQ	29.0	23.2	*	15.0
FYCS	6.3	22.6	*	*
Want to recommend method for trial				
CSM	61.3	60.7	61.1	67.6
IGE	32.4	41.7	71.4	47.4
MEQ	32.3	63.6	*	53.3
FYCS	37.5	54.7	*	*
Want to recommend method for use				
CSM	22.6	33.3	35.2	44.1
IGE	24.3	31.7	42.9	31.6
MEQ	25.8	46.5	*	31.7
FYCS	18.8	37.7	*	*

*Data on this method not obtained at this site.

	Methuen %	Boise %	Cambridge %	Hamilton %
Want to recommend rejection of method				
CSM	0	0	11.1	11.8
IGE	5.4	15.0	14.3	15.8
MEQ	9.7	16.2	*	10.0
FYCS	0	17.0	*	*
THE SESSION CONVINCED ME TO:				
Try parts of method				
CSM	83.9	67.9	77.8	82.4
IGE	62.2	53.3	71.4	71.1
MEQ	64.5	76.8	*	76.7
FYCS	50.0	58.5	*	*
Try method on full scale basis				
CSM	6.5	10.7	31.5	17.6
IGE	18.9	13.3	14.3	15.8
MEQ	9.0	21.2	*	20.0
FYCS	0	15.1	*	*
Use parts of method continuously				
CSM	77.4	53.6	59.3	52.9
IGE	45.9	35.0	85.7	60.5
MEQ	45.2	61.6	*	58.3
FYCS	37.5	50.9	*	*
Use complete method continuously				
CSM	6.5	14.3	16.7	8.8
IGE	13.5	11.7	14.3	18.4
MEQ	29.0	20.2	*	13.3
FYCS	12.5	11.3	*	*

*Data on this method were not obtained at this site.

	Methuen %	Boise %	Cambridge %	Hamilton %
Reject method entirely				
CSM	3.2	3.6	11.1	14.7
IGE	10.8	11.7	28.6	3.9
MEQ	12.9	15.2	*	16.7
FYCS	12.5	9.4	*	*
What I am doing is same as method				
CSM	22.6	14.3	16.7	11.8
IGE	29.7	21.7	42.9	35.3
MEQ	41.9	57.6	*	40.0
FYCS	25.0	26.4	*	*

*Data on this method were not obtained at this site.

APPENDIX C

Responses to Open-Ended Questions
(By Site and Topic)

C-1 Comments Pertaining To General Feelings About The Displays.

C-2 What Respondents Said They Liked Most About Displays.

C-3 What Respondents Said They Liked Least About Displays.

C-4 What Respondents Said Could Be Done To Make Displays More Useful To Them.

C-5 Comments About Impact Of Displays On Feelings About NIE/HEW.

C-6 Further Information Respondents Said They Wanted.

C-7 Sources From Which Respondents Had Received Information Prior To Coming To Display.

C-8 Information Cited As Most Helpful.

C-9 General Comments Regarding the Methods and Displays Given By Respondents At End Of Follow-Up Interviews. (Includes comments about sources of information used in decisions regarding use of the method; what the person liked about the display or method; and comments about plans pertaining to use of method.)

COMMENTS OF RESPONDENTS PERTAINING TO GENERAL FEELINGS ABOUT THE DISPLAYS

(From Boise Displays)

Comprehensive School Math:

--need more actual handling of materials to be used; I don't know how to evaluate this as method now in use
--interesting; attractive; colorful; eye-catching
--very attractive, interesting; video-tape was good; useful information; learning material on display
--impressive; very attractive; compact
--good; showed method in use
--expected more practical use materials; not video or show
--impressed, but would have liked more material
--impressed; pictures and phones
--quite good; don't normally get to see this kind of display here
--nice; "It's different"; clean, listen at leisure
--well done; interesting; audio-visual of the children
--very effective; video display; manipulative devices
--very good; the good ideas
--good; attractive and informative
--really interesting; different and new
--very good; students' enthusiasm
--OK
--OK

Mini-Course in Effective Questioning:

--impressive, effective means of conveying idea; new, clear, exciting-looking; electronic
--favorable; concise, compact
--favorable; color, conciseness
--well built
--very attractive
--attractive
--fair
--very good; pictorial
--good; informative
--interesting, outstanding; audio-visual meets a need in a generally weak area in the in-service program
--very good; structure and presentation
--OK; not too exacting and not too long
--attractive; different; audio-visual part
--a good idea
--real good; picked up points
--adequate, beautiful, clear picture; prior knowledge
--favorable; complete, repeatable
--favorable; complete
--all right; good way of presenting information
--beautiful; physical appearance; listening to tape
--positive; word questioning caught me eye

(From Hamilton Displays)

Comprehensive School Math:

--good, but not enough information
--attractive, but not real life; testing before buy
--good; some newness
--very effective; not efficiency; attractiveness, listening
--kind of vague, need someone there to question; no specific information
--liked it; attractive and usefulness
--interesting idea; too late
--attractive, well done
--very good; incorporation of ideas
--wanted to see more
--good, individualizing
--need for more information, but adequate
--too fast; recording too general
--no
--good; new, colorful, naturalness of pictures
--good
--impressing; awful lot of money
--impressive, practical; films and different items to impress
--very good; very understandable
--very vague
--disappointed; kits necessary; gadget orientated
--generally good
--very attractive display; display of manipulative objects; colorful
--should be in more layman's terms; lack of math background
--dissatisfied
--too general, wanted to know more
--interesting; pictures
--wasn't what anticipated; paper
--clear, interesting; idea of student to advance on his own
--very good
--good

Individually Guided Education in Multi-Unit Schools:

--so-so; too general, doesn't show enough about actual materials
--very effective in its purpose; audio-visual
--great; colorful pictures, children's expression
--adequate; covers material
--vague; information was incomplete
--neutral
--more concrete objects; physical but well presented
--informative; audio-visual presentations
--more information for educators; too simple
--attractive and convenient; carpet, display, watch screen and listen, don't need to read
--very nice presentation; physically attractive

(From Methuen Displays)

Individually Guided Education in Multi-Unit Schools:

--effective because of private sound
--eye-catching; very effective
--superficial; not divided into areas; too general
--good; knew about it
--marvelous; eye-opener; thorough; informative
--innovative; ingenuity
--effective; arousing interest; artistically well set up
--effective; interest in IGE; ideal situation on right panel
--good; reactions of others
--good; big, colorful
--very good; goes with my thoughts on education
--very good; general background material it presented
--good; way presented made it interesting
--excellent way to introduce it; get interest; appealing, good to look at; easy to use
--attractive; way presented
--eye-catching; good introduction; good visual, audio approach
--new, interesting, worth looking at; because of newness and the worth of looking at it
--aesthetically nice; need someone with display
--general; "It gave me an overview"; things not covered in depth; no details
--adequate
--liked it; presented well
--interesting; presentation good; brief; gets interest
--good introduction; already involved in program
--fair; the casual approach

First Year Communication Skills:

--informative; general set-up (visual, written)
--interesting; new idea
--interested; like it; it showed different activity
--educational; valuable; interesting; colors of rugs; general color scheme is appealing
--good
--not relevant; high school biology teacher
--excellent
--too broad; can't explain something in five minutes
--good introduction
--disappointed; just reading
--excellent; practical the way it is set up
--good
--children aren't realistic for inner city; wall display for classroom is unrealistic
--good; watch material if wanted to; liked display of material
--wasn't varied; too wordy
--good; varied; attractive
--attractive; title, good display
--all right, good materials to make point
--excellent; lay-out clear, concise

WHAT RESPONDENTS SAID THEY LIKED MOST ABOUT THE DISPLAYS

(From Boise Displays)

Comprehensive School Math:

--video tape; attractive to look at
--compact, concise
--organization; informative
--examples in video
--audio-visual
--the telephones; effective arrangement
--pictures
--all quite interesting
--probably gets us ready for consulting session
--video display--manipulative devices
--new ideas and different approaches
--the materials
--actually seeing it
--I feel we have a need for this program

Mini-Course in Effective Questioning:

--overall structure
--conciseness
--slide presentation
--compactness
--design
--carpet
--pictures
--photos and description
--pictures
--individual; the newness; cleanliness of general presentation. The display itself is very attractive
--slides and narration
--how well it showed the teacher using it and contact of teacher back with student. Taped comment combined with pictures. Teacher had time for individual child.
--pleasant
--repeatable
--no
--pictures and TV use--organization

(From Hamilton Displays)

Comprehensive School Math:

--content
--attractiveness; something new, but is it educationally sound?
--audio-visual; efficiency
--slides and talking
--the tapes and slides; liked to see new ideas
--screen presentation
--audio-visual; display of objects
--the idea
--use of materials; how much material necessary
--the viewer; pamphlet; generates interest
--manipulative materials
--new, colorful, naturalness of pictures
--clear
--slides
--all fits together
--the more material, the better
--showed new ways in which new ideas can be used in education
--display of the material
--recording was more illustrative
--motivational, more creative
--pictures, colors and shapes
--attractive
--idea of student to advance on his own
--introduction

Individually Guided Education in Multi-Unit Schools:

--pictures at side
--audio-visual
--attractive pictures and recording
--audio-visual technique
--liked sequential pictures
--audio-visual effect is good
--read or hear or look at pictures; 3 different media; move around at own speed
--whole thing
--the way presented; rugs for tired feet, move at own pace and listen again if desired
--earphones; screen
--slides; speaking
--the two types of committees were best idea; the good organization
--scheduling flexibility; looks like child will progress at own rate if this is good
--audio-visual effect
--just individualized instruction idea
--recordings and pictures
--taped program; diagrams
--basic overall audio-visual layout

Appendix C-2-3

(From Methuen Displays)

Individually Guided Education in Multi-Unit Schools:

--introduction to individualize
--compact, neat, color; beautiful
--concise to a tee
--visual presentation
--more individual concern for child's needs
--in-service help; consultations
--TV
--teacher and children organized; doing activities; colorful, interesting
--pictures helped hold interest while listening
--way presented made it interesting
--stand and absorb on my own rather than sit through another meeting
--slides; the way it was presented; organized
--audio display
--informative
--mechanical questioning would add; tie in with computer; ask a question, come back with the answer
--informal
--the way teachers worked in unit; effect on the children
--appealing; want to listen to it
--audio-visual display
--interaction with groups; physical appearance
--private sound
--slide presentation

First Year Communication Skills:

--oral presentation; informative
--the children were actively interested; good student contact
--the tutorial presentation
--concise manner
--field of reading
--set-up; pictures
--nothing; I was disappointed
--tape explanation
--compact; to the point; aroused interest
--over-all
--description of school division
--filmstrip
--AV part
--filmstrip
--center; self-explaining

Appendix C-3-1

WHAT RESPONDENTS SAID THEY LIKED LEAST ABOUT THE DISPLAYS

(From Boise Displays)

Comprehensive School Mathematics:

--didn't show any of actual book content
--lack of tactile information; lack of information for primary level education
--lack of material; too much time for show, not enough for content
--not enough material; display of materials meager
--not being able to see objects and handle
--literature doesn't tell enough
--lack of depth of display, relating to information
--nothing
--very little

Mini-Course in Effective Questioning:

--cost of use to district not included
--wanted to see inside books
--curious about inside books
--not enough information
--should be able to sit to listen
--went over different booklets too quickly
--possibly misleading title
--wanted to see more of exactly what groups were doing
--not relevant
--not enough earphones
--no place to sit down
--nothing
--seems unreal because of lack of money, etc. Needed an in-service program.
--too incomplete
--not informed enough about it
--no time to question; it was fast
--need a little more detail of how it works

(From Hamilton Displays)

Comprehensive School Math:

--didn't prove enough; no face-to-face contact
--not enough information given on high school level (9-12)
--cost
--vagueness
--no way to ever be able to use it
--too low volume
--wasn't loud enough
--not enough
--lack of information; could be more informative
--more examples please; using the models
--needed more time
--needed more materials out where you can look; requires a great deal of money which most people don't have; some method to get into schools without the large outlays of cash; use funds spent on displays to get into schools.
--too structured; everyone must take entire package
--recording was too selective
--not enough applicable information on a first and second grade level; price?
--too brief; more applicable to elementary
--needed more specifics; wanted to see and use
--doesn't apply to primary grade levels
--not enough detail

Individually Guided Education in Multi-Unit Schools:

--too brief
--volume of recording
--should have someone to explain the thing
--see a video tape of children participating in program
--nothing
--not enough information; see materials in use
--not enough information; too general
--nothing
--too general
--title too vague
--recording could be clearer
--may not apply to fine arts
--not enough detail

(From Methuen Displays)

Individually Guided Education in Multi-Unit Schools:

--not long enough; not enough information; more description about what the children are doing
--too general
--too general
--printing too small (near-sighted)
--amount of materials
--nothing; "It was all OK"
--no pictures with children in action and now the groups are really grouped
--lack of detail, yet many would not want to stand and listen to details
--science not mentioned
--mechanical questioning would add; tie in with computer; ask a question, come back with the answer
--things not covered in depth; no details, left unanswered questions about what was presented
--not long enough
--time limitation
--nothing really; good way to present the material
--did not say much more than she actually knew
--time of run good

First Year Communication Skills:

--she liked it all
--parent assisted angle; our parents work; teacher directed program not novel
--lack of information
--children aren't realistic for inner city; wall display for classroom is unrealistic
--too much educational jargon and not enough media information
--all interesting
--there wasn't anything wrong with it
--pictures on board

WHAT RESPONDENTS SAID COULD BE DONE TO MAKE DISPLAYS MORE USEFUL TO THEM

(From Boise Displays)

Comprehensive School Mathematics:

--more written material
--showing material in text
--manipulative objectives presented, lesson guide
--too much time for show, not enough for content
--increase content
--provide "hands-on" material
--more detail in literature; some of materials to handle
--application to pre-primary levels
--revisit it when it is not the end of the day
--having someone at the display to explain in greater detail
--show texts
--more "hands-on" material
--to have manipulative materials on display
--need more actual handling of materials to be used

Mini-Course in Effective Questioning:

--nothing
--wanted to see more of exactly what groups were doing
--system method not relevant
--OK
--prices; person to answer questions
--not previously informed
--some way to give input and get feedback
--chance to actually look at the hardware and software
--more explanation as to what it's all about
--show more on elementary
--give more detail on how it works

(From Hamilton Displays)

Comprehensive School Math:

--volume could have been higher
--more volume
--more simply stated; more resources; are there more brochures?
--more applicable to elementary
--more practical
--additional information
--more specifics
--prove better against control group
--nothing
--effects on computation
--more specific information and material you can touch and use
--knowledge about before coming
--to have seen at beginning of day
--very good
--more information
--more examples please; using the models
--sample lessons, more specific information
--slower please
--cost
--more materials; cost
--cost and feasibility

Individually Guided Education in Multi-Unit Schools:

--have exposure to method before
--information to take back to school
--more concrete objects; more real situations
--actual performances
--see materials in use
--more information
--more on staffing procedure
--orient more toward high school teaching; orient more toward teaching rather than administration
--feels another "listening" session would be beneficial
--give precise examples
--grouping and planning
--film could have been incorporated; chairs never set up
--more applicable to fine arts; music
--longer tapes, more detail and interacting between kids and teachers, materials used

(From Methuen Displays)

Individually Guided Education in Multi-Unit Schools:

--more description about effect on children
--more specific knowledge
--more IGE machines
--more geared to secondary education
--less reading matter on display
--actual situation (15-20 minute demonstration lesson)
--more time
--should be more "show and tell"; practical application
--more information on funds, concrete information to work with
--nothing, because we're not using it in our system
--mention of Eric
--live explainer might be more effective at display
--somewhat in my field
--suggestion box; need people here, not just machines
--for secondary education; gives only elementary
--more specific
--increase the time
--have more of the material that they use available; texts used, planning stages
--more information on different methods and activities in different areas
--more from the teacher's point of view

First Year Communication Skills:

--on a higher grade level; methods; materials
--satisfied; liked it
--materials to look at
--more information
--include more than reading
--make it longer; compact; arouse interest
--nothing
--information on how method might be used in rural schools

Appendix C-5-1

COMMENTS OF RESPONDENTS PERTAINING TO IMPACT OF DISPLAYS ON FEELINGS ABOUT NIE/HEW

(From Boise Displays)

Comprehensive School Mathematics:

--positive
--favorable, but not toward all the programs
--new techniques always welcome
--wish we could benefit by all they have to show
--need more information
--wish she could own some of it
--presentation of different ideas and interest in trying them out
--appreciate efforts to show new concepts
--more enthusiastic; well-done sessions; secondary thing after consultants; need training to make the judgments
--very interested
--the idea is not new, just packaged
--If more explicit material is available for evaluation, I would appreciate receiving it. Individualized programming seems to work out well with the self-motivated, self-determined learner, but I have found others care so little, they fail to ask pertinent questions.

Mini-Course in Effective Questioning:

--glad to see they are doing something. This is greatly needed at all levels of education in an in-service type program.
--positive--it appears that good efforts are being made to develop new educational ideas and methods
--let teacher have information about it earlier
--They were "on the ball" for our future educators. Wasn't sure what USOE was. Main thing is to have all the equipment and materials to work with and an efficient library aid to keep it accessible when child is ready for it. Supporting resource center also. Anxious to learn more about it.
--pleased that someone is working to improve tools, materials, techniques for education. Hope that shortly the cost of these materials will go down so all may use them.
--something needed for the over-privileged child who is the average student
--wondering what the agency is all about. Want to know more information about it. It was too fast. Boise doesn't have enough materials on individualizing; need more.
--hadn't identified as being with USOE or NIE
--a good thing; early childhood education with parents being a part - parents should be here!
--better--to the point
--the guy tried hard
--it's very good
--a lot of money went into it. What are they selling? Only see two. Looks worthwhile -- too bad if more people don't come. Worth coming to see.

(From Hamilton Displays)

Comprehensive School Math:

--glad to see it's going on; cost seems incredible
--thought it was a lot more
--seemed to be looking for new ideas
--exciting changes; incorporation of good parts of the old with change
--impressed. Wished to have more information and more teacher-parent involvement.
--two-week training periods would be very interesting. Would be eager to learn new ways to apply methods of display to present block and space play education.
--wish knew more about this type of information in Montana. Information did not come out soon enough for the teachers to get time off.
--impact of change is well worthwhile
--do good job; good exhibit--more information; redundant questions
--completely new attitude; enjoyable, very good, good information
--relatively small, proving of the system
--probable, but cost is prohibitive
--closer to spending money; amazed that it came to Hamilton
--would like more materials on certain phases
--would like to know more about results
--she's curious about it now
--really colorful and well done
--the whole idea of it
--should continue
--more detailed information
--"shows they're doing something!"
--didn't realize this was available
--funds entirely misspent after you do research; they have nothing to help individual schools
--want everyone to conform to this system

Individually Guided Education in Multi-Unit Schools:

--more insight into how NIE/HEW introduce new instructional programs
--more bureaucratic waste
--I got a good feeling. There should be more of such programs in general.
--it helps me understand trends toward more programmed instruction
--glad they're out and doing this. This is what education is all about.
--looking in right direction but no room for improvising, not so rigid. Didn't like the Readiness program; against reward idea.
--good idea, but not feasible for the majority
--good job with what has been done. Hope Nixon doesn't cut funds.
--surprised they funded this display. How does a child have control of his learning?
--might be difficulty with resistance from teachers
--feel that you must experiment to get empirical
--first time aware they did this sort of thing
--expresses various programs introduced by NIE/HEW
--behind in time (innovation). Elementary school here already is more sophisticated with three years experience.

(From Methuen Displays)

Individually Guided Education in Multi-Unit Schools:

--shows government interest in educaticnal progress
--good for exposure
--"It's good for type of child we're getting in the schools today. Years ago it may have been boring but children were motivated. Today if they don't want to learn they refuse. It's no longer the pleasure to teach."
--brand new
--more aware of new innovations
--would like to use in class
--too general
--to bring valuable innovative methods like this into my school
--doing much much more of this type of thing. Administrators need more of this--far removed from classroom--they don't see the need for any of these ideas even if (which they don't) attend some of these meetings with innovative ideas. Feel IGE is ideal--no school can drop and do all this, nor have funds, staff for this program.
--funds for the program: How to convince people in local community of the importance. As a counselor, I know can't measure importance of many things. Yet, I need to justify this statistically. In education, research needs to be done before spending the money. Need an idea how to motivate people in the community for programs.
--really question if this method has any different or better results than old methods. Like to see results after students have completed study under IGE. "Can't envision for high school English: seems to apply only to elementary education."
--used some of their material before. Could have microfiche information up there. Could save on pamphlet cost explaining detailed planning. Interested in it, but do not know much of what's going on yet. Would like to visit Methuen and see what's going on here.
--concern

First Year Communication Skills:

--impressed with the R & D centers; enlightening to public; good public relations
--good feelings; good set-up
--glad to learn how a portion of tax money is spent
--see where money is spent
--worthwhile contribution by Department
--good for helping children--knowing new methods--even if they can use part of them
--that they've got a lot of money in this; effective questioning more pertinent
--this particular display was not relevant to me
--is very helpful
--aroused curiosity
--doesn't feel display does justice to the methods being used
--more money should be spent; cost is a big factor of the consumers

FURTHER INFORMATION RESPONDENTS INDICATED THEY WANTED

(From Boise Displays)

Comprehensive School Math:

--materials
--teacher methods; how to obtain the program
--demonstration by people
--get exposure to actual material
--more in general
--materials and application
--how to use it
--how to use; what it is
--more details
--how do you get information on course; information on materials and equipment
--how could it be used in the first grade to introduce concepts
--see what books are like; be able to feel materials (how durable); cost
--I would like to see the actual kit; teacher guide or training material
--how it might apply to smaller children
--demonstration
--more of manipulative objects
--cost; more manipulative material
--handling of materials
--see more of objects; see youngsters working with it
--cost; probably use parts; how to use; what it is
--something no display can offer; discussion with our staff
--more detailed on how to use; cost of materials
--see more of equipment and materials; texts
--cost
--I did not go to the session but a fellow teacher felt that the concepts would further confuse rather than clarify

Mini-Course in Effective Questioning:

--where to get it; cost; availability in Boise schools
--how many can use it; can it be rented; would need more than this if on a budget
--cost of implementation
--sample lesson
--specific information about the complete program
--more about setting it up in class; how to get materials
--more detail on how to use; how to apply; how to work as tutor; need training on machines
--implementation of Mini-course
--cost; availability
--more about it; where to get it; cost; availability in Boise schools
--see one of the booklets; depth of questions; steps in using methods
--cost of implementation
--I would have to receive information in every area
--training session; more detail on how to use

(From Hamilton Displays)

Comprehensive School Math:

--all
--more about applicability to third grade
--sent to school for group decision on implementation
--preschool and primary
--prices; staffing
--more specific
--no; too elementary
--effect on computation
--more on grades 4-6
--materials and use
--cost; staffing; kit use
--cost; implementation; understand whole method
--written information
--lower grades; 4-5
--teacher's guide use in other school systems where they were used; what type of school system?
--no use seeking further information; not feasible financially
--all and cost
--more of materials working with; how better to adapt to teaching circumstance other than model practices
--cost; materials; staffing; aides; involvement to install
--further explain; more illustrations
--what's in the kit; price
--more about applicability to third grade
--cost; staffing
--lay person good; not specific enough
--system was thought to be a poor system to be introduced at primary level; method, however, could be very effective for higher grades
--about exact equipment and implementation
--more information; illustrated result; especially wished to see examples of where it was used before
--more on practical application
--effect on computation
--like to see materials and use them
--cost and staffing and to use kit
--cost; implementation; more understanding; more background
--how to go about getting it into school; how it would work for small school
--would like more general information on program that deals more in specific areas of the program
--teacher's guide use in other school systems where they were used; what type of school system?
--more specific examples
--haven't finished
--more information please
--books on Jr. high
--more of materials working with; how better to adapt to teaching circumstance other than model practice
--cost; materials; staffing; aides; involvement to install
--staff; cost

(From Hamilton Displays)
continued

Individually Guided Education in Multi-Unit Schools:

--how detailed are individual student plans and how are they carried out
--if applicable to fine arts
--consulting
--cost and children reaction to it
--cost of implementation
--how available; how implemented
--not sure
--interest of students in method; outcomes needed; results
--what goals are being worked for; objectives
--staffing procedures; specifics (research) concerning effectiveness
--results of research and evaluation of systems; cost factor; practical ways to implement; in-service exposure for teachers and public, racial and economic groups; urban, racial, ghetto, etc.; variations of each method
--consulting
--if applicable to fine arts
--how detailed are individual student plans and how are they carried out
--more detail anytime; requirements for teachers; how individual student plans are implemented
--consulting
--cost and children reaction to it
--increased length using students
--cost of implementation
--what is the cost of materials
--results of program; cost; how hard to implement; where do they find planning time
--what goals are being worked for objectives
--books; papers; in-depth information
--staffing procedures; specifics (research) concerning effectiveness
--too administratively oriented; should have more on actual teaching involved
--that dealing with problems related to implementing program into system; i.e., how about teachers who do not want program or student problems
--show something in music
--more about time used for planning; more about student grouping
--results of research and evaluation of systems; cost factor; practical ways to implement; in-service exposure for teachers and public, racial and economic groups; urban, racial, ghetto, etc.; variations of each method
--more detail anytime; requirements for teachers; how individual student plans are implemented
--consulting

(From Methuen Displays)

Individually Guided Education in Multi-Unit Schools:

--effectiveness comparison with old method
--more results, adaptation to smaller school
--NEC
--set-up needed; costs; materials; building
--information in the area of art education
--visual actual operation
--application to subject matter
--how to go about writing the project that you could get the money for
--underlying principles
--physical requirements, the display didn't say much in addition to the consulting session
--more about every phase; details; need booklet form which I picked up
--how program actually works; pupil's response; amount of increased learning as compared to traditional method
--in science area
--any research done; post-research; experimental, controlled group set-up; how does it fit into emotional adjustment of the child and social adjustment
--more concrete facts
--cost; materials, etc.
--structure, cost
--cost; space; information related to older buildings
--different methods for implementation
--more of effect on students; cost; implementation of program
--more results and comparisons of results on children
--cost; effect; methods; materials; interests
--more study
--interaction with those involved in such a program
--physical requirements
--like to know how they got principal free for instructing; also principal not always best instructor
--information on materials
--involved people telling as it is
--like to see if done in the area of science
--cost of this program; how to actually implement these ideas; who to go to
--more of cost; results; what happens to students when they complete this kind of study
--already knew about it
--cost; materials; feasibility for small school building; see it in use
--everything omitted in Question 11

First Year Communication Skills:

--studies; evaluation
--higher grade level; methods; materials, etc.
--specifics

(From Methuen Displays)
continued

--more general information
--more material on a higher grade level; 6-7
--on parent program
--further discussion of children and people involved; more on actual materials used; teacher made, etc., and machines that will be provided
--less dull
--information on the use in regular classrooms
--more materials
--much more information of all sorts needed

SOURCES FROM WHICH RESPONDENTS HAD RECEIVED INFORMATION ABOUT METHOD PRIOR TO COMING TO DISPLAY

(From Boise Displays)

Comprehensive School Mathematics:

--talked to superintendent about it; attended meeting about it at B.S.C. Portland laboratory; heard about it via pamphlet
--read about it in newspaper; talked to Tom Tracy about it; heard about it via associates
--read about it in a magazine (Grade Teacher); saw a movie about it
--read about it in books; attended meeting about it; saw it being used
--saw filmstrip at our school made by Boise schools
--read about it in bulletin

Mini-Course in Effective Questioning:

--read about it in education magazines, NIE literature; talked to school administrators about it; attended meeting about it at McKinley (organizational meetings)
--saw is being used at our school; heard about it via IMC Center
--read about it in NEA Journal, English Journal

Appendix C-7-2

(From Hamilton Displays)

Comprehensive School Math:

--talked to daughter about it
--heard about it at a school meeting
--heard about it at a school meeting
--talked to administration about it; saw movie about it
--read about it in newspaper; talked to superintendent about it
--read about it in article in Education Magazine
--read about it in brochure; was on committee; talked to Linda Thomas (of Chicago) about it; attended a planning session on it; heard about it via Linda Thomas
--read about it in the letter they sent him involving information
--read about it in Education Periodicals; talked to people in number of meetings about it; heard about it via staff meeting; saw TV show about it

Individually Guided Education in Multi-Unit Schools:

--read about it in college; talked to college professor about it; saw it being used at a number of schools
--read about it in Ravalli County Republican and Missoulian; saw it being used at graduate class
--heard about it via school teaching
--saw movie about it
--attended meeting about it; project visit at Nashua, Montana
--attended meeting about it and have visited other consultations and mostly organized a program on her own
--read about it; attended meeting about it at own school; saw it being used: saw movie about it; saw TV show about it
--read about it in professional journals and textbooks and current education books
--read about it; presently in use in school system

(From Methuen Displays)

Individually Guided Education in Multi-Unit Schools:

--talked to involved teachers about it; heard about it via school papers and Eagle Tribune
--read about it in professional magazines; talked to involved teachers about it; read about it via professional magazines
--talked to fellow teacher about it; heard about it via a friend
--read about it in newspaper; talked to superintendent; saw it being used at Marsh, Howe; heard about it via superintendent
--attended meeting about it at Marsh School
--heard about it via superintendent
--read about it in educational periodicals
--read about it in newspaper; talked to other teachers, and administrators; saw it being used at Marsh School; heard about it via newspaper
--talked to superintendent about it
--talked to teachers about it; saw it being used at Marsh School
--read about it in professional journals
--read about it in newspaper; talked to MEC about it; attended meeting about it at Marsh School; saw it being used at Chelmsford; heard about it via MEC; saw movie about it
--saw it being used at Marsh School
--read about it in newspaper; talked to Miss Ryan about it
--read about it in pamphlets, teachers' magazines; talked to colleagues about it; attended meeting about it at Wilmington (in-service programs); saw it being used in her own classroom; heard about it via newspapers; saw movie about it
--attended meeting about it in Wilmington (in-service); saw it being used at Midwest schools; saw a movie about it

First Year Communication Skills:

--read about it in Teacher's magazine
--attended classes about it at Merrimack Education Center; heard about it via fellow teacher
--read about it in Fitchburg State; saw it being used at Phillips Academy, Fitchburg State, Boston University
--attended meeting about it last year
--heard about it in school

THE FOLLOWING INFORMATION WAS LISTED BY RESPONDENTS AS BEING MOST HELPFUL

(From Boise Displays)

Comprehensive School Math:

- --the interest of students in the method
- --manipulative material on video
- --explanation of use
- --effect on students' learning; interest of students in method
- --good way to present materials and evaluation of what is learned; practical aspect

Mini-Course in Effective Questioning:

- --prior knowledge
- --pictures
- --step-by-step sequence in teaching; effective use of equipment
- --training session; more detail on how to use

(From Hamilton Displays)

Comprehensive School Math:

- --plans on expectations and levels
- --mini-computer
- --don't have staffing
- --could see worth of the method
- --principles

Individually Guided Education in Multi-Unit Schools:

- --integration with consulting
- --organization
- --showing how structure is presented throughout method

(From Methuen Displays)

Individually Guided Education in Multi-Unit Schools:

--organization of the staffing
--general idea
--reaffirmation of enthusiasm of children in ability to choose

First Year Communication Skills:

--feedback on what the responses of students were; check-ups; interest of student tutor helping child; individualized
--the tutorial program explanation; reinforced present convictions
--slides; worksheets; everyday activity
--does not apply to my area
--with the leaflet
--filmstrip and how it can be used
--they felt it was a way for living rather than a teaching method
--content; felt for strictly inner-city

GENERAL COMMENTS REGARDING THE METHODS AND DISPLAYS
GIVEN DURING FOLLOWUP INTERVIEWS

(From Boise Displays)

Comprehensive School Math:

--talking to others
--none beside the display. Display was interesting; very compact of presenting information; would like to have opportunity to handle materials.
--the information received at the display and a mathematics course that she had taken; more demonstrations
--presentation; lack of funds hinders us from trying the complete method
--the display gave a few ideas. Too many people in the consulting sessions to get most out of them; couldn't see the materials as well as I'd like, nor get a chance to ask questions. Would be helpful if program could be demonstrated in each school.
--seeing the product; the workshop; very beneficial to all; we can say that from experience.
--wouldn't know where to order; like my present program pretty well; information in display sketchy, but can't show much in a display
--displays and consulting session; she would like more information; lack of money, lack of time for not trying
--attractiveness of display
--state legislature
--haven't really talked about it; too expensive. Didn't get to the consulting sessions, but thought that the displays were good.
--school itself
--enjoyed them; workshop better than the display
--lack of funds; liked the workshop and thought the displays were excellent
--thought the displays were excellent; impressed by them
--Boise was to concentrate on reading program this year. Awful hard to get an idea about method unless you can get your hands on the items.

Mini Course in Effective Questioning:

--machines; well done
--decided that it couldn't be done because of limited staff and classroom space
--wasn't very impressed with any of the methods
--grad course
--aware about it from the college (Utah State). She is transferring to another school and didn't have the opportunity to bring this idea up to her present system.
--presentation; too much of a lack of information
--beneficial
--it has been a long time ago, and the sessions were so short. I was especially interested in the program about critical thinking and questioning.

(From Boise Displays)
continued

--more centrally located city
--the displays interested me enough that I attended the sessions which showed more about how each unit works. Both interested me, but I know of little followup that our district is making in the use of these methods.
--the discussion at the display program; was very impressed with the idea but thought it wasn't feasible on a full-scale level
--the presentation
--journals, presentations and display
--talking to other people; very unhappy; didn't like people in the MEQ display; very obnoxious; wanted him to only spend time in that one display
--the filmstrip at the display was very impressive and the representative was helpful
--got information (third grade level) from the display and other classrooms in her school started to use the program
--program too costly
--presentation was good; liked MEQ

Individually Guided Education in Multi-Unit Schools:

--sorry that he missed the consulting session
--thought that the displays were very good; he wishes they had the money to use them all
--decided that because of the cost, it couldn't happen; couldn't really comment because she didn't see the whole program
--teacher use on the spot "hands on" workshop type idea
--displays and the workshop; more information given to the schools before the display program so that the teachers have some background about the programs
--many of the things in the display weren't applicable to their situation. She wasn't too impressed (overall) with the display.
--thought that it was well done and the people that handled it were well informed
--workshop, seminar. These displays don't really apply to me; I'm switching over to art.
--been to many displays and conferences and can't remember
--reinforced some of the ideas he already had about teaching math; the display program; wasn't enough literature put out ahead of time
--expected to see more material; did same thing in followup as in session; very repetitive in terms of content. All right for teachers "in the sticks" but too simplistic for most teachers; they already know most of what is in the displays.
--too expensive
--display, workshop experience
--prices listed

(From Boise Displays)
continued

First Year Communication Skills:

--display and wrote to Washington, D.C. and planned to do more about it this summer; went on the wrong day so she missed the consulting sessions; she feels it was the fault of the advertising of the program
--observing; commercial firms, displays were well done; we do take advantage of these conferences
--the only place she heard about it was at the display; liked it
--favorably impressed but wished the workshops could have been in smaller groups
--the audio-visual aids at the display; Boise State professor; felt that instead of recorded messages there should have been people at the display
--more available to people
--more involvement previous to the display
--the display and materials distributed; thought that the display was good
--the displays didn't do much for me one way or the other. I can't remember anything about them now; did not know what we were getting into when we went to the display, so we didn't get much out of it; more briefing ahead of time would have helped
--presentation itself; really enjoyed
--presentation, as quick as it was; not what she expected
--journals, films, etc., somewhat disappointing
--different teachers that had seen it demonstrated. Would let students take an active part in the classroom.
--funds for Head Start are limited, so it is necessary to establish priorities in selecting materials to use. There were many stimulating exhibits and ideas, but so far not followed through on any of them.

(From Hamilton Displays)

Comprehensive School Math:

--looking for something more for high school; small groups talked about advanced math; liked; like a more practical aspect
--live demonstration; how it actually works; "Heard several people say if it wasn't for federal money, we wouldn't have it"
--good in certain areas for school systems with the money; their school system doesn't have the money
--interesting
--school is not very innovative; but thinks that it is a good program from what he had seen at the display
--the man doing the demonstration was wonderful; the consulting session
--too expensive
--just being discussed; no information has been sought
--wrote to USOE to get more information; filled out questionnaire at the display
--presentation itself; the "machine"
--presentation itself; very good; seemed like too much of a utopia
--just discussed it with the principal; no action is being taken because they have just started a multi-level program
--reading materials; visual aids at the presentation itself; rather interesting
--seminar; discussion and people; don't like "slick plastic machines"; lengthen your presentations
--enjoyed the presentation
--one of his teachers lives on the campus of Montana University and he works closely with this teacher in the partial MEQ program in the school
--too much money needed; trying them
--discounted it completely because of the cost

Mini-Course in Effective Questioning:

--tiring displays
--my own experience with discussions at the University of Montana
--University of Montana contact
--the consultant; too expensive; display itself rather boring
--the question and answer session in the consulting session
--training at school; forgot about most of it; interesting though
--presentations only; nice to have, but too much money
--went to University of Montana to talk to staff members
--presentations
--presentation; talking to friends; too much money
--I requested additional information and as yet have failed to receive any
--the presentation was interesting and seemed like a good program for teaching
--the school system that she is now teaching in has already adopted parts of the program. The sessions were helpful in showing her what else could be added
--have already been implementing many methods; too expensive
--looking at the display

(From Hamilton Displays)
continued

Individually Guided Education in Multi-Unit Schools:

--direct viewing; would like to see it in a "music display"
--pamphlets given out at the display
--presentation more than the display
--articles I've read; too expensive; liked the concept; traveling ed show
--wrote to the CSM people for more information; the man that put on the display was very helpful in giving ideas to use the program with this schools; limited funds
--professor; contact with the university
--was too expensive; we don't tend to innovate; we just try to survive here
--presentations
--in secondary education, so it was not applicable; felt the display was only useful for primary teachers
--their principal was very instrumental in starting the program; he had inquired about the program at the University
--not trying any parts of the program; not very innovative
--the workshop session was very informative; the man was very helpful
--the display itself; very exasperating; have written over and over for information, but haven't received any; followup is very poor
--going to lecture to get more information on IGE

First Year Communication Skills:

--somewhat skeptical about the value of these displays
--city display; materials you could see and feel; floor plan made you involved
--speakers on the machines were loud; presentations too fast; the man with the math was excellent
--consulting sessions; FYCS; not impressive; outdated as far as our school; already beyond this
--lecture at the display; methods more geared to total school system; would like more that an individual teacher could do
--didn't get notice soon enough to attend the consulting session, but found displays interesting
--learning games; good explanation, more displays should be brought into this area; math presentation was excellent; need to know about new math; seminar--did not know it was open to public; felt advertised for only school staff members
--just seeing the display; good ideas in it; somewhat individualized teaching in our own school; we wanted more than was presented
--personal sources (talking to others); displays were done quite well; all programs dealt with money and that limits our opportunity to use
--visual set-up and guidance given at the consulting session
--math--really liked CSM; materials and individualization seemed to be functional; really liked consulting sessions and being able to actually talk to someone about it

(From Hamilton Displays)
continued

--publisher representatives; University Education classes; no reactions other than what was covered; not really too impressed
--consultants; face to face conversation; one-to-one contact; more than just a machine; consultants were very good
--display itself; consultants were crucial; people handling the demonstrations are the most crucial variable; need more resource personnel available to school teachers, etc., to keep them innovative
--machines we already have at our school; I like the idea of kids working around a resource machine; teaches them to budget their time well
--your display was an old-hat method; I've seen it implemented in other school systems in many different forms; waste of time
--hampered by lack of help; also in rural area; need to do more for individuals themselves; very, very enjoyable; have employed the methods in my kindergarten class; how about another session?!?

(From Methuen Displays)

Comprehensive School Math:

--we will use CSM here next year in grade 7; Jerry Exum was best source
--no money; went to the display with the idea that we would be able to use it now, but maybe in the future
--a principal at a school in her district is using the method and she has talked with her about it, but limited funds have prohibited the program
--they are trying another math program now and don't want to get involved with this at this time; enjoyed displays but didn't go to the consulting sessions
--discussion
--read about it, the presentation; the whole thing; now have it installed
--liked this idea of motivation
--the display; really like the individual approach
--they are using another program in their school; she enjoyed it
--she wasn't very impressed because she felt it was too expensive for her school system
--they are using IGE so it wouldn't be likely that they would change to CSM; so she wasn't too interested. She came too late to hear the speakers so she didn't feel she got too much out of the program.
--the Wisconsin design for math; very hectic, but once it gets going, it's great
--workshops; need lots of money

Mini-Course in Effective Questioning:

--reading; consultation with people, observing personal contact with one using it. Wished she had gotten there earlier to have been able to sit in on the consulting sessions. She doesn't feel that by just observing she knows that much about it.
--myself, I am very interested in anything to do with individual teaching; disappointed in other displays; audience was bored; partly presentation's fault
--conferences
--I find that I use this method, that is I always evaluate my performance and modify succeeding presentations in the light of results achieved; e.g., I teach two lessons in written language from the same plan -- Lesson II is improved because I have the benefit of personal observations on Lesson I. (Lesson III is different because class is made up of low achievers). I do not feel comfortable in the use of hardware such as projectors, records, tapes, etc., although I have tried it and no doubt it is useful for individual work especially.
--displays mainly
--direct contact with the company. Liked the way you could go to the displays that only interested you. Then, you could leave when you desired and not have to sit through an entire demonstration.

(From Methuen Displays)
continued

--enjoyed the program; presentation well done
--the display itself; math was very disappointing and poorly presented; actual conferences were an absolute disaster (Many felt that way)
--enjoyed viewing the displays but based my decision on our own system. Decided against the method because it is just too expensive for our Catholic school trying to stay open.
--audio-visual aids; TV close circuit information; transparency; purchased some while there
--the man who conducted the presentation
--money more than anything
--very good; the reason their school system didn't use these methods was lack of money
--conferences, the display itself, the coordinator
--the display; discussion we had afterwards, method of establishing the dialogue; they were useful
--the display itself; too expensive
--we will use the "Mini course in Effective Questioning" next fall. Seeing examples of 16mm films and talking with the consultant convinced us of the program's merit
--other teachers, etc., not really that interested in display
--display not valuable to attend because not enough information on how you use it in the classroom. Need live demonstration and actual curriculum materials available. Didn't help me learn about specific program methodology; more like an advertising promotion campaign for these ideas. Want more practical "how to do it" items included in the demonstration, display in the future

Individually Guided Education in Multi-Unit Schools:

--I'm too old; I'm on the way out. Don't care for these new ideas
--they are using IGE in the school now and prior to the display. A man came to the school to demonstrate the method and left pamphlets. You couldn't hear through the earphones; she liked the displays though
--talking to teachers in IGE
--very well done; now when he reads in journals he is aware of other programs. The University of Wisconsin was a great help in making available pre-service training, films, etc., to show teachers and parents
--watching program in action in the classroom in equivalent system; ran out of pamphlets; wished they had more written material
--main contact with people familiar with IGE is own administrator; good in catching interest but wants to see in practice; experiencing himself
--just the presentation
--on-going in several schools in town; the workshop; when are you installing one in my school; nothing but good words for it
--my own background
--ed displays; saw it there but more important saw IGE in action in two of the nearby schools; already pretty well into it before the displays
--presentation, that's all; hasn't really formed a feeling either way

(From Methuen Displays)
continued

--presentation itself was way too expensive
--presentation itself; the telephones
--journals; with a display like that, more conferences are needed
--information that she received; favored very much
--attended conference at Holiday Inn, Mary Mac Education Center; plan to go next year with IGE
--people who could be at the display; journal articles on research available; how to implement programs would be very useful
--seminar; things we've read; concept only geared to the elementary; how about secondary?
--principals who are using it; Merrymack Educational Publication; did not specifically fit junior high level
--staff bulletins, journals; likes to look for advancement, display should have lasted for more than one day
--school system had been using IGE before presentation was put on; she didn't know what source had made them decide to use it

First Year Communication Skills:

--thought it cost too much
--simplicity of the tools themselves; hopeful for having it next year
--the film; system too sterile; display was boring, too terrible
--contact with colleague who used method; strong reaction in praise; films at display were excellent; liked set-up, problem was number of people; impressed by teachers to be able to see things happening across the nation
--consultant session; pamphlets; very interesting; need more of; would have liked people permanently situated at each display
--conferences
--workshops; more primary
--word-of-mouth, discussions with other members of the school staff; he said that he wasn't thrilled by it, but it was educational
--the children enjoyed it
--the conference
--exhibition was very good, small situation
--one person at displays to answer questions
--negative reaction to the displays; needed someone right by the display to answer questions
--articles I've read; it was part of a class I was taking; it required that we attend
--the display itself; favorably impressed

(From Tacoma Displays)

Comprehensive School Math:

--it would have been more effective if we could have had an expert to talk to about the products; really interesting
--lot of red tape to try anything new; I will be revamping the third grade math this summer; recommend; is individually guided; first year; decision to use by Curriculum Director; thought the displays were a complete waste of time; if they could have had someone to discuss and demonstrate with students, that would have been great; came away with the feeling someone was trying to sell us a package and we don't have the money
--visits to University of Puget Sound; and upper division courses in college; displays should be circulated more widely among small colleges; VTR of the methods might be even better
--Arithmetic Teacher Journal; in my school, we're using Addison-Wesley Individualized Math; add some elements from the displays; would help to get hands on materials at the displays
--tried to ask someone but couldn't find anyone; wish there had been someone there to find out about cost and use; displays were fantastic, but needed two-way communication
--the display; my biggest hangup is a feeling of inadequacy about trying something new; I was very impressed by the display
--workshops; administrators; consultants

Mini-Course in Effective Questioning:

--displays were very beneficial
--talking with other teachers, professional magazine and English Journal, Today's Education; really helps to have someone there to answer questions about the method
--had conference at school last year; critical decision; new staff didn't think ready yet to undertake
--reading about it in professional journals and literature from display; discussing it with other staff; displays were really interesting. was fascinated by others' reactions to the displays
--pamphlets and discussing; thinking of trying parts of methods; really exciting displays; inspired me
--visual displays and talks with principals; good idea; well done; sometimes headsets not working; need closer supervision
--literature distributed at display; I enjoyed seeing it; wish there had been someone to answer questions

Individually Guided Education in Multi-Unit Schools:

--displays were very beneficial
--IGE initiated in 1972; planning started on IGE before the displays
--really enjoyed MACOS program; looking for new math; bulletin from University of Washington

(From Tacoma Displays)
continued

--had conference at school last year; critical decision; new staff didn't think ready yet to undertake
--cost was deterrent (additional staff; old building, limits); with money and proper facilities, it would be interesting to try; display was good way to get attention; eye-catching
--reading about it in professional journals and literature from display; discussing it with other staff; displays were really interesting; was fascinated by others' reactions to the displays
--has been at Madison, Wisconsin Lab., many of the things had tried and was disappointed that all they had was the displays and cards to order more information; national professional meetings with experts there to discuss; idea of getting it to people is fantastic; listening to others attending the displays, I was amazed at the comments; most people must have not been reading much
--contact with people who have tried; publishers; are working on individualized math; thinking about IGE; display was tremendous; could push button and get main points quickly
--learning activity packages; State Library; couldn't get much out of the machines
--meetings with other principals; physical set-up left much to be desired; no one to talk to or ask questions
--tried to ask someone but couldn't find anyone; wish there had been someone there to find out about cost and use; displays were fantastic, but needed two-way communication
--visual displays and talks with principals; good idea; well done; sometimes headsets not working; need closer supervision
--have league of IGE schools affiliated with University of Washington; picked up leaflet on FYCS at it; already exposed to ideas prior to displays; developing own individualized math series; displays well done; effective way of being informed; 60-70 teachers in our system went through; they enjoyed it, let them see others were trying new things too; it's a nice way to transport ideas

First Year Communication Skills:

--talking with other teachers; professional magazine and English Journal, Today's Education; really helps to have someone there to answer questions about the method
--demonstrations or speakers in the school; couldn't get hands on materials; wish could have; have idea exchange within the school district about twice a year; maybe more often; curriculum coordinator sets them up
--visits to University of Puget Sound; and upper division courses in college; displays should be circulated more widely among small colleges; VTR of the methods might be even better
--mainly displays and conferences; displays should be available more frequently; I took thorough notes and I'm going through them for things to implement
--literature distributed at display; I enjoyed seeing it; wish there had been someone to answer questions

APPENDIX D

Tabulation of Responses

Table D-1 Composite Adoption Scores Prior to Visiting the Display Sites

Table D-2 Behaviors Pertaining to Adoption of the Four Teaching Methods Prior to Visiting the Display Sites

Table D-3 Composite Adoption Score After Viewing the Displays for Those Interviewed at the Display Sites

Table D-4 Impact of Visiting Displays on Expected Actions Pertaining to Adoption of the Teaching Methods

Table D-5 (A) Kinds of Information Respondents Obtained About the Teaching Methods Prior to Visiting the Display Sites; (B) Kinds of Information Which Respondents Found Most Valuable in the Displays

Table D-6 Sources of Information Used to Learn About: (A) The Teaching Methods Prior to Visiting the Display Sites; (B) Availability of Displays for Viewing

Table D-7 (A) Respondents' Feelings About the Displays; (B) Impact of Display on Respondents' Feelings About NIE/HEW

Table D-8 Position of Respondent on School Staff

Table D-9 Number of Pupils in Respondent's School System

Table D-10 Distribution of School Systems on Innovativeness Scale

Table D-11 Sources of Information Reported As Most Useful

Table D-12 Sources Named As Ones in Which Respondents Had Read About the Methods

Table D-13 Feelings About Selected Qualities of the Teaching Methods

Table D-14 Years of Experience in Teaching and Administration

Table D-15 Level of Academic Training of Respondents

Table D-16 Frequency of Different Kinds of Contact Both Outside and Within the School System

Table D-17 Relationship of Attendance at Consulting Sessions With Selected Variables

Table D-18 Comparison of Characteristics of Respondents at Each of Three Sites on Selected Variables

Table D-19 Table of Values for Figuring Interval Estimates for Percentages in Tables D-1 Through D-18

Tabulation of Responses to Interviews for Each of Four Topics
(Data are totals for all sites)

Table D-1: Number and Percentage of Respondents at Each Level on the Composite Adoption Measure Prior to Visiting the Display Sites for Each of Four Teaching Methods and for all Four Combined

Adoption Level	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
a. No action	25	49.0	39	71.0	41	69.5	35	70.0	140	65.1
b. Only sought information	0	0	3	5.5	0	0	1	2.0	4	1.9
c. Discussed with colleagues	0	0	0	0	0	0	0	0	0	0
d. Considered use	3	5.9	2	3.6	4	6.3	1	2.0	10	4.7
e. Sought information and considered use	4	7.8	1	1.9	3	5.1	0	0	8	3.8
f. Tried it	0	0	0	0	1	1.7	0	0	1	0.5
g. Considered use and tried it	1	2.0	0	0	1	1.7	0	0	2	0.9
h. Accepted for continued use or rejected after trial	2	3.9	2	3.6	2	3.4	0	0	6	2.8
i. Sought information, considered use and tried	2	3.9	3	5.5	0	0	1	2.0	6	2.8
j. Sought information, considered use, tried and adopted or rejected	14	27.5	5	9.1	7	11.9	12	24.0	38	17.7
TOTAL	51	100.0	55	100.2	59	100.1	50	100.0	215	100.2

Table D-2: Number and Percentage of Respondents Reporting Each of a Set of Behaviors Pertaining to Adoption of Four Teaching Methods Prior to Visiting The Display Sites

Behaviors Pertaining to Adoption	Teaching Methods IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
Aware of method	27	54.0	21	38.2	23	39.0	21	42.0	92	43.0
Sought information	18	37.5	10	19.6	9	15.8	10	20.0	47	22.8
Considered using:										
(a) parts	12	24.5	5	9.6	7	11.9	7	14.3	31	14.8
(b) yes, as presented	12	24.5	8	15.4	10	17.0	7	14.3	37	17.7
Trial:										
(a) parts	9	18.4	4	7.7	5	8.6	4	8.5	22	10.7
(b) yes, as presented	8	16.3	4	7.7	5	8.6	8	17.0	25	12.1
Used method in my school:										
(a) parts	12	25.0	5	9.6	5	8.5	2	4.2	24	11.6
(b) yes, as presented	6	12.5	2	3.9	5	8.5	8	16.7	21	10.1
Method used in other school in system:										
(a) parts	9	19.2	6	11.8	7	12.3	7	14.6	29	14.3
(b) yes, as presented	12	25.6	1	2.0	6	10.6	7	14.6	26	12.9
Method considered and decided against use in our system:										
(a) no	36	80.0	48	92.3	54	94.8	40	85.1	178	88.6
(b) against trial	5	11.1	0	0	1	1.8	2	4.3	8	4.0
(c) against continued use	4	8.9	4	7.7	2	3.5	5	10.6	15	7.5

Table D-3: Number and Percentage of Respondents, Interviewed at the Display Sites, Who Were Placed At Each Level of the Composite Adoption Measure Based on Their Reports of the Impact From Visiting the Display Site (For each of four teaching methods and for all four combined.)

Adoption Level	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
a. No action	1	3.0	4	10.8	0	0	4	26.7	9	8.5
b. Only sought information	2	6.1	5	13.5	3	14.3	2	13.3	12	11.3
c. Discussed with colleagues	3	9.1	6	16.2	2	9.5	1	6.7	12	11.3
d. Considered use	1	3.0	1	2.7	1	4.8	0	0	3	2.8
e. Sought information and considered use	6	18.2	3	8.1	4	19.1	2	13.3	15	14.2
f. Tried it	1	3.0	1	2.7	1	4.8	0	0	3	2.8
g. Considered use and tried it	1	3.0	5	13.5	0	0	1	6.7	7	6.6
h. Accepted for continued use or rejected after trial	0	0	0	0	0	0	0	0	0	0
i. Sought information, considered use and tried	2	6.1	4	10.8	2	9.5	2	13.3	10	9.4
j. Sought information, considered use, tried and adopted or rejected	16	48.5	8	21.6	8	38.1	3	20.0	35	33.0
TOTAL	33	100.0	37	99.9	21	100.1	15	100.0	106	99.9

Table D-4: Number and Percentage of Respondents, Interviewed at the Display Sites, Who Reported Each of a Set of Impact Behaviors as a Result of Visiting the Display Site (For each of four teaching methods and for all four combined.)

Impact Behaviors	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
The display made me:										
Want to get more information	25	75.8	25	67.6	16	76.2	9	60.0	75	70.1
Think about trying new approaches	26	78.8	24	64.9	10	47.6	8	53.3	68	64.2
Want to discuss method with colleagues	25	75.8	22	59.5	11	52.4	6	40.0	64	60.4
Think about adopting parts of method	20	60.6	18	48.7	7	33.3	6	40.0	51	48.1
Think about adopting complete method	4	12.1	2	5.4	2	9.5	0	0	8	7.6
Want to recommend method for trial	16	48.5	12	32.4	10	47.6	1	6.7	39	36.8
Want to recommend method for use	8	24.2	8	21.6	5	23.8	1	6.7	22	20.8
Want to recommend rejection of method	0	0	0	0	3	14.3	1	6.7	4	3.8
The display convinced me to:										
Try parts of method	17	51.5	18	48.7	10	47.6	6	40.0	51	48.1
Try method on full scale basis	4	12.1	1	2.7	1	4.8	0	0	6	5.7
Use parts of method continually	11	33.3	11	29.7	8	38.1	4	26.7	34	32.1
Use complete method continually	5	15.2	0	0	0	0	0	0	5	4.7
Reject method entirely	1	3.0	1	2.7	0	0	0	0	2	1.9
What I am doing is same as method	12	36.4	9	24.3	1	5	2	13.3	24	22.9

Table D-5: Number and Percentage of Respondents, Interviewed at the Display Sites, Who Named Each of Several Kinds of Information: (A) Obtained Prior to Visiting the Display Sites; and (B) As Being The Most Valuable Found in the Displays

	Teaching Methods									
	IGE		CSM		MEQ		FYCS		TOTAL	
	N	%	N	%	N	%	N	%	N	%
(A) Kinds of information obtained prior to visiting displays:										
Effects on students' learning	10	30.3	4	10.8	3	14.3	1	6.7	18	17.0
Cost of materials	3	9.1	1	2.6	1	4.8	0	0	5	4.7
How to use method	11	33.3	3	7.9	2	9.5	0	0	16	15.1
Underlying principles	14	43.8	9	24.3	2	9.5	0	0	25	24.1
Materials required	7	21.9	2	5.3	2	9.5	2	13.3	13	12.3
Staffing requirements	9	27.3	1	2.6	2	9.5	1	6.7	13	12.2
Interest of students in method	11	33.3	3	7.9	2	9.5	1	6.7	17	15.9
Other	8	24.2	8	21.1	1	4.8	0	0	17	15.9
(B) Kinds of information found most valuable:										
Effects on students' learning	22	66.7	27	73.0	10	47.6	9	60.0	68	64.2
Cost of materials	7	21.2	4	10.8	4	19.1	1	6.7	16	15.1
How to use method	13	39.4	13	35.2	3	14.3	3	20.0	32	30.2
Underlying principles	18	54.6	14	37.8	8	38.1	6	40.0	46	43.4
Materials required	10	30.3	13	35.1	7	33.3	5	33.3	35	33.0
Staffing requirements	17	51.5	6	16.2	5	23.8	3	20.0	31	29.3
Interest of students in method	20	60.6	21	56.8	5	23.8	7	46.7	53	50.0
Other	5	15.2	3	8.1	4	19.1	1	6.7	13	12.3

Table D-6: Number and Percentage of Respondents, Interviewed at the Display Sites, Who Named Each of Several Sources of Information Used To: (A) Learn About the Teaching Methods Prior to Visiting the Display Sites; and (B) Find Out About Availability of Displays For Viewing at Site They Visited

	Teaching Methods									
	IGE		CSM		MEQ		FYCS		TOTAL	
	N	%	N	%	N	%	N	%	N	%
(A) Sources used for information about methods prior to visiting display site:										
Read about it	10	31.3	11	31.4	2	9.5	1	6.7	24	23.3
Talked to someone about it	10	30.3	8	22.9	1	4.8	0	0	19	18.3
Attended a meeting about it	5	15.2	4	11.1	0	0	0	0	9	8.6
Saw it being used	9	27.3	2	5.9	1	4.8	1	6.7	13	12.6
Heard about it (from colleagues)	8	24.2	3	8.6	1	4.8	1	6.7	13	12.5
Saw a movie about it	4	12.1	4	11.1	0	0	0	0	8	7.7
Saw a TV show about it	1	3.0	1	2.8	0	0	0	0	2	1.9
(B) Sources for finding out about the displays:										
Local school announcement	21	80.8	21	63.6	13	92.9	6	60.0	61	73.5
University course	0	0	2	6.1	0	0	1	10.0	3	3.6
State Dept. of Educ. bulletin	0	0	1	3.0	1	7.1	0	0	2	2.4
Local newspaper	2	7.7	1	3.0	0	0	1	10.0	4	4.8
Local radio	0	0	1	3.0	0	0	0	0	1	1.2
Local TV	0	0	0	0	0	0	0	0	0	0
"Word of Mouth"	0	0	2	6.1	0	0	2	20.0	4	4.8
Letter	3	11.5	4	12.1	0	0	0	0	7	8.4
Other	0	0	1	3.0	0	0	0	0	1	1.2

Table D-7: Number and Percentage of Respondents, Interviewed at Display Sites, Who Expressed Positive, Neutral, or Negative Feelings About: (A) Each of the Displays, in General; and (B) NIE/HEW As a Result of Viewing the Displays

	Teaching Methods									
	IGE		CSM		MEQ		FYCS		TOTAL	
	N	%	N	%	N	%	N	%	N	%
(A) Feelings about display:										
Not relevant	1	3.1	0	0	0	0	0	0	1	1.0
Negative	6	18.8	4	12.1	0	0	3	23.1	13	13.5
Neutral	3	9.4	2	6.1	1	5.6	0	0	6	6.3
Positive	22	68.8	27	81.9	17	94.4	10	76.9	76	79.2
Total Responding	32	100.1	33	100.1	18	100.0	13	100.0	96	100.0
(B) Impact of display on feelings about NIE/HEW:										
Negative	2	6.5	2	6.1	10	52.6	1	7.7	15	15.6
Neutral	16	51.6	18	54.6	1	5.3	7	53.9	42	43.8
Positive	13	42.0	13	39.4	8	42.1	5	38.5	39	40.6
Total Responding	31	100.1	33	100.1	19	100.0	13	100.1	96	100.0

Table D-8: Position of Respondents on School Staff (By teaching method on which data were collected.)

Position of Respondent on School Staff:	Teaching Method IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
a. Teacher	36	73.5	41	77.4	42	72.4	36	72.0	155	73.8
b. Department head	0	0	2	3.8	2	3.5	1	2.0	5	2.4
c. Principal	2	4.1	5	9.4	6	10.3	5	10.0	18	8.6
d. Assistant Principal	1	2.1	1	1.9	0	0	1	2.0	3	1.4
e. Superintendent	3	6.1	0	0	1	1.7	1	2.0	5	2.4
f. Assistant Superintendent	0	0	0	0	0	0	1	2.0	1	.5
No Answer	7	14.2	4	7.5	7	12.1	5	10.0	23	11.0
TOTAL	49	100.0	53	100.0	58	100.0	50	100.0	210	100.1

Table D-9: Number of Pupils in School System of Respondents Who Were Interviewed at Display Sites

Number of Pupils in School System:	Teaching Method IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
a. 1 - 299	4	13.3	2	6.9	0	0	2	15.4	8	8.6
b. 300 - 599	3	10.0	3	10.3	1	4.8	0	0	7	7.5
c. 600 - 999	1	3.3	1	3.5	0	0	0	0	2	2.2
d. 1,000 - 2,499	8	26.7	10	34.5	0	0	0	0	18	19.4
e. 2,500 - 4,999	7	23.3	3	10.3	1	4.8	3	23.1	14	15.1
f. 5,000 - 9,999	5	16.7	1	3.5	1	4.8	8	61.5	15	16.1
g. 10,000 - 24,999	1	3.3	8	27.6	12	57.2	0	0	21	22.6
h. 25,000 - 99,999	1	3.3	1	3.5	6	28.6	0	0	8	8.6
TOTAL	30	99.9	29	100.1	21	100.2	13		93	100.1

Table D-10: Number and Percentage of Respondents Placing Their School System at Each of Five Levels on Innovativeness

When It Comes To Trying New Programs, My School System Tends To Be:	Teaching Method IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
Among the last	3	6.1	5	9.6	4	7.0	1	2.2	13	6.4
Somewhat later than most	9	18.4	8	15.4	9	15.8	4	8.9	30	14.8
Average	13	26.5	17	32.7	16	28.0	15	33.3	61	30.0
Somewhat earlier than most	13	26.5	14	26.9	14	24.6	14	31.1	55	27.1
Among the First	11	22.5	8	15.4	14	24.6	11	24.4	44	21.7
TOTAL	49	100.0	52	100.0	57	100.0	45	99.9	203	100.0

Table D-11: Number and Percentage of Respondents Naming Each of a Set of Sources of Information As Most Useful in Deciding About Adoption of the Teaching Methods

Source of Information	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
Professional meetings, demonstrations and conferences outside the school system	24	47.1	22	42.3	31	52.5	26	52.0	103	48.6
University contacts	1	2.0	4	7.7	5	8.5	4	8.2	14	6.6
Professional journals	4	7.8	2	3.8	2	3.4	2	4.1	10	4.8
Research and development bulletins	1	2.0	0	0	0	0	1	2.0	2	1.0
U. S. Government publications	1	2.0	1	2.0	0	0	1	2.0	3	1.4
Visits to R & D Centers	0	0	0	0	1	1.7	0	0	1	0.5
Visits to other schools	3	5.9	2	3.8	1	1.7	3	6.1	9	4.3
State Dept. of Educ. reports	1	2.0	0	0	1	1.7	0	0	2	1.0
Newspapers, TV and radio	0	0	0	0	1	1.7	0	0	1	0.5
Teachers' meetings within system	2	4.0	4	7.7	5	8.6	1	2.0	12	5.7
Publishers and other commercial contacts	1	2.0	4	7.7	5	8.6	4	8.2	14	6.6
Total number on which percentages are based	51		52		59		49		211	

Table D-12: Number and Percentage of Respondents Who Named Each of Several Sources as Ones They Used to Read About The Teaching Methods

Sources	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
Professional journals	18	36.0	16	30.2	18	30.5	19	38.0	71	33.3
Pamphlets from the research & development units	16	32.0	12	22.6	13	22.0	12	24.0	53	25.0
Popular magazines	12	24.0	6	11.3	6	10.7	6	12.0	30	14.2
Popular books	4	8.0	4	7.6	2	3.4	2	4.0	12	5.7
Newspapers	1	2.0	2	3.8	0	0	0	0	3	1.4
State Dept. of Educ. reports	1	2.0	1	1.9	0	0	1	2.0	3	1.4
U. S. Government publications	0	0	0	0	0	0	1	2.0	1	0.5
All other sources	7	14.0	2	3.8	3	5.2	5	10.0	17	8.0
Number on which percentages are based	50		53		59		50		212	

Table D-13: Number and Percentages of Respondents, Interviewed at Display Sites, Who Indicated Their Feelings About Selected Qualities of the Teaching Methods

Qualities of Teaching Method		Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
A. Usefulness:											
Worthless	-2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	-1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	3	7.5	1	2.5	4	20.0	1	6.7	9	7.8
	+1	14	35.0	18	45.0	7	35.0	5	33.3	44	38.3
Useful	+2	22	55.0	15	37.5	7	35.0	5	33.3	49	42.6
No Answer		1	2.5	6	15.0	2	10.0	4	26.7	13	11.3
TOTAL		40	100.0	40	100.0	20	100.0	15	100.0	115	100.0
B. Practicality:											
Impractical	-2	0	0.0	1	2.5	3	15.0	0	0.0	4	3.5
	-1	3	7.5	3	7.5	1	5.0	2	13.3	9	7.8
	0	9	22.5	7	17.5	2	10.0	3	20.0	21	18.3
	+1	12	30.0	12	30.0	7	35.0	4	26.7	35	30.4
Practical	+2	15	37.5	12	30.0	5	25.0	3	20.0	35	30.4
No Answer		1	2.5	5	12.5	2	10.0	3	20.0	11	9.6
TOTAL		40	100.0	40	100.0	20	100.0	15	100.0	115	100.0
C. Newness:											
Out-of-Date	-2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	-1	2	5.0	0	0.0	0	0.0	0	0.0	2	1.7
	0	5	12.5	6	15.0	5	25.0	5	33.3	21	18.3
	+1	12	30.0	14	35.0	3	15.0	3	20.0	32	27.8
New	+2	18	45.0	14	35.0	10	50.0	4	26.7	46	40.0
No Answer		3	7.5	6	15.0	2	10.0	3	20.0	14	12.2
TOTAL		40	100.0	40	100.0	20	100.0	15	100.0	115	100.0

Table D-13: Continued

Qualities of Teaching Method		Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
D. How Interesting:											
Dull	-2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	-1	0	0.0	0	0.0	0	0.0	1	6.7	1	0.9
	0	7	17.5	2	5.0	5	25.0	3	20.0	17	14.8
	+1	12	30.0	15	37.5	5	25.0	6	40.0	38	33.0
Exciting	+2	20	50.0	16	40.0	7	35.0	2	13.3	45	39.1
No Answer		1	2.5	7	17.5	3	15.0	3	20.0	14	12.2
TOTAL		40	100.0	40	100.0	20	100.0	15	100.0	115	100.0
E. Comparison With Present Method:											
Worse	-2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	-1	0	0.0	1	2.5	3	15.0	2	13.3	6	5.2
	0	13	32.5	6	15.0	6	30.0	3	20.0	28	24.3
	+1	11	27.5	18	45.0	2	10.0	4	26.7	35	30.4
Better	+2	15	37.5	8	20.0	6	30.0	2	13.3	31	27.0
No Answer		1	2.5	7	17.5	3	15.0	4	26.7	15	13.0
TOTAL		40	100.0	40	100.0	20	100.0	15	100.0	115	99.9

Table D-14: Number and Percentage of Respondents With Varying Amounts of Experience

Type And Number of Years Experience	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
A. Years in Present School:										
1 - 2	14	27.5	21	39.6	18	30.5	12	24.0	65	30.5
3 - 5	9	17.6	9	17.0	15	25.4	15	30.0	48	22.5
6 - 10	9	17.6	13	24.5	13	22.0	7	14.0	42	19.7
11 - 15	6	11.8	5	9.4	4	6.8	6	12.0	21	9.9
16 - 20	4	7.8	0	0.0	2	3.4	2	4.0	8	3.8
21 - 25	3	5.9	2	3.8	3	5.1	3	6.0	11	5.2
26 and over	3	5.9	3	5.7	3	5.1	2	4.0	11	5.2
*None reported	3	5.9	0	0.0	1	1.7	3	6.0	7	3.3
TOTAL	51	100.0	53	100.0	59	100.0	50	100.0	213	100.1
B. Years of Experience in Teaching:										
1 - 2	8	15.7	11	20.8	10	16.9	8	16.0	37	17.4
3 - 5	8	15.7	10	18.9	12	20.3	9	18.0	39	18.3
6 - 10	10	19.6	12	22.6	15	25.4	9	18.0	46	21.6
11 - 15	7	13.7	8	15.1	6	10.2	8	16.0	29	13.6
16 - 20	4	7.8	4	7.5	6	10.2	2	4.0	16	7.5
21 - 25	2	3.9	5	9.4	1	1.7	4	8.0	12	5.6
26 and over	7	13.7	1	1.9	7	11.9	6	12.0	21	9.9
*None reported	5	9.8	2	3.8	2	3.4	4	8.0	13	6.1
TOTAL	51	99.9	53	100.0	59	100.0	50	100.0	213	100.0
C. Years of Experience in Administration:										
0	41	80.4	39	73.6	41	69.5	35	70.0	156	73.2
1 - 2	3	5.9	6	11.3	3	5.1	6	12.0	18	8.5
3 - 5	2	3.9	2	3.8	8	13.6	0	0.0	12	5.6
6 - 10	5	9.8	3	5.7	4	6.8	5	10.0	17	8.0
11 - 15	0	0.0	2	3.8	0	0.0	1	2.0	3	1.4
16 - 20	0	0.0	0	0.0	1	1.7	3	6.0	4	1.9
21 - 25	0	0.0	1	1.9	0	0.0	0	0.0	1	0.5
26 and over	0	0.0	0	0.0	2	3.4	0	0.0	2	0.9
TOTAL	51	100.0	53	100.1	59	100.0	50	100.0	213	100.0

*University students in Teacher Training

Table D-15: Number and Percentage of Respondents With Different Amounts of Academic Training

Academic Training	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
(A) Highest degree completed:										
Less than B.A.	4	7.8	5	9.4	2	3.4	1	2.0	12	5.6
B.A.	29	56.9	37	69.8	39	66.1	30	60.0	135	63.4
M.A.	17	33.3	11	20.8	16	27.1	18	36.0	62	29.1
Ed. D. or Ed. Specialist	0	0.0	0	0.0	1	1.7	1	2.0	2	0.9
Ph.D.	1	2.0	0	0.0	0	0.0	0	0.0	1	0.5
Other	0	0.0	0	0.0	1	1.7	0	0.0	1	0.5
TOTAL	51	100.0	53	100.0	59	100.0	50	100.0	213	100.0
(B) Number of courses beyond last degree during last 3 years:										
0 - none	16	31.4	15	28.3	10	17.0	17	34.0	58	27.2
1 - 2	12	23.5	10	18.9	12	20.3	5	10.0	39	18.3
3 - 5	12	23.5	10	18.9	18	30.5	15	30.0	55	25.8
6 - 10	4	7.8	10	18.9	13	22.0	8	16.0	35	16.4
11 - 15	2	3.9	6	11.3	5	8.5	2	4.0	15	7.0
16 or more	5	9.8	2	3.8	1	1.7	3	6.0	11	5.2
TOTAL	51	99.9	53	100.1	59	100.0	50	100.0	213	99.9

Table D-16: Number and Percentage of Respondents Reporting Different Frequencies of Different Kinds of Contacts Outside Their School System and Within Their School System Pertaining to Teaching Methods

Kind and Frequency of Contacts	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
(A) Attended consulting session at displays:										
No	25	50.0	26	49.1	31	52.5	21	42.9	103	48.8
Yes	25	50.0	27	50.9	28	47.5	28	57.1	108	51.2
TOTAL	50	100.0	53	100.0	59	100.0	49	100.0	211	100.0
(B) How convenient to visit university:										
Very convenient	21	42.0	17	32.1	16	27.1	21	42.9	75	35.6
Fairly convenient	16	32.0	13	24.5	26	44.1	17	34.7	72	34.1
Fairly difficult	8	16.0	14	26.4	8	13.6	9	18.4	39	18.5
Very difficult	5	10.0	9	17.0	9	15.2	2	4.1	25	11.9
TOTAL	50	100.0	53	100.0	59	100.0	49	100.1	211	100.1
(C) Frequency of contact with university or college staff:										
Less than once a year	12	24.0	14	26.4	12	20.3	6	12.5	44	21.0
1 - 5 times a year	12	24.0	17	32.1	23	39.0	17	35.4	69	32.9
6 - 11 times a year	6	12.0	6	11.3	9	15.2	6	12.5	27	12.9
1 - 3 times a month	10	20.0	8	15.1	7	11.9	7	14.6	32	15.2
Once a week or more	10	20.0	8	15.1	8	13.6	12	25.0	38	18.1
TOTAL	50	100.0	53	100.0	59	100.0	48	100.0	210	100.1

Table D-16: Continued

Kind and Frequency of Contacts	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
(D) Number of professional meetings attended outside of school system during past year:										
None	11	22.4	16	30.2	8	13.8	8	16.0	43	20.5
1	8	16.3	6	11.3	6	10.3	5	10.0	25	11.9
2 - 3	15	30.6	15	28.3	16	27.6	18	36.0	64	30.5
4 - 5	5	10.2	6	11.3	9	15.5	9	18.0	29	13.8
More than 5	10	20.4	10	18.9	19	32.8	10	20.0	49	23.3
TOTAL	49	99.9	53	100.0	58	100.0	50	100.0	210	100.0
(E) Number of conferences, workshops, etc., attended within school system during past year:										
None	8	15.7	5	9.4	7	11.9	8	16.0	28	13.2
1	9	17.7	14	26.4	3	5.1	5	10.0	31	14.6
2 - 3	9	17.7	17	32.1	16	27.1	14	28.0	56	26.3
4 - 5	5	9.8	6	11.3	12	20.3	4	8.0	27	12.7
6 - 10	12	23.5	8	15.1	14	23.7	9	18.0	43	20.2
11 - 15	4	7.8	2	3.8	5	8.5	4	8.0	15	7.0
16 or more	4	7.8	1	1.9	2	3.4	6	12.0	13	6.1
TOTAL	51	100.0	53	100.0	59	100.0	50	100.0	213	100.1
(F) Composite scores for frequency of communication with staff in other school systems:										
9 - 12 (lowest frequency)	20	39.2	20	37.7	21	35.6	17	34.0	78	36.6
13 - 16	10	19.6	10	18.9	11	18.6	10	20.0	41	19.2
17 - 20	9	17.6	11	20.8	13	22.0	7	14.0	40	18.8
21 - 24	8	15.7	7	13.2	4	6.8	4	8.0	23	10.8
25 - 28	3	5.9	4	7.6	6	10.2	6	12.0	19	8.9
29 - 32	0	0.0	1	1.9	1	1.7	5	10.0	7	3.3
33 - 36	0	0.0	0	0.0	2	3.4	0	0.0	2	0.9
37 - 40	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
41 - 45 (highest frequency)	1	2.0	0	0.0	1	1.7	1	2.0	3	1.4
TOTAL	51	100.0	53	100.1	59	100.0	50	100.0	213	99.9

Table D-16: Continued

Kind and Frequency of Contacts	Teaching Methods: IGE N	IGE %	CSM N	CSM %	MEQ N	MEQ %	FYCS N	FYCS %	TOTAL N	TOTAL %
(G) Frequency of communication with staff in school systems which are:										
1) More than 100 miles away --										
a. less than once a year	33	66.0	41	74.6	34	57.6	23	46.0	131	61.2
b. 1 - 5 times a year	15	30.0	12	21.8	19	32.2	20	40.0	66	30.8
c. 6 - 11 times a year	1	2.0	1	1.8	3	5.1	3	6.0	8	3.7
d. 1 - 3 times a month	0	0.0	1	1.8	2	3.4	2	4.0	5	2.3
e. once a week or more	1	2.0	0	0.0	1	1.7	2	4.0	4	1.9
TOTAL	50	100.0	55	100.0	59	100.0	50	100.0	214	99.9
2) From 15 - 100 miles away --										
a. less than once a year	19	38.0	18	32.7	22	37.3	19	38.0	78	36.5
b. 1 - 5 times a year	16	32.0	16	29.1	19	32.2	16	32.0	67	31.3
c. 6 - 11 times a year	8	16.0	10	18.2	9	15.2	3	6.0	30	14.0
d. 1 - 3 times a month	5	10.0	11	20.0	6	10.2	8	16.0	30	14.0
e. once a week or more	2	4.0	0	0.0	3	5.1	4	8.0	9	4.2
TOTAL	50	100.0	55	100.0	59	100.0	50	100.0	214	100.0
3) Less than 15 miles away --										
a. less than once a year	14	28.0	20	36.4	16	27.1	26	52.0	76	35.5
b. 1 - 5 times a year	10	20.0	13	23.6	14	23.7	8	16.0	45	21.0
c. 6 - 11 times a year	7	14.0	4	7.2	5	8.5	3	6.0	19	8.9
d. 1 - 3 times a month	9	18.0	9	16.4	11	18.6	6	12.0	35	16.4
e. once a week or more	10	20.0	8	14.5	11	18.6	6	12.0	35	16.4
f. no school systems that near	0	0.0	1	1.8	2	3.4	1	2.0	4	1.9
TOTAL	50	100.0	55	99.9	59	99.9	50	100.0	214	100.1

Table D-18: Number and Percentage of Respondents For Selected Variables For Each of Three Display Sites

Variables Compared With Location of Displays	Sites							
	Methuen		Boise		Hamilton		Total	
	N	%	N	%	N	%	N	%
A. Highest Degree Completed:								
Less than B.A.	2	2.7	5	7.2	5	6.9	12	5.6
B.A.	33	44.6	47	68.1	55	76.4	135	62.8
M.A.	37	50.0	16	23.2	11	15.3	64	29.8
Beyond M.A.	2	2.7	1	1.5	1	1.4	4	1.8
TOTAL	74	100.0	69	100.0	72	100.0	215	100.0
Chi Square 29.2 at 10 df; sig. .005 level								
Means	2.57		2.20		2.11		2.30	
B. Frequency of University Contact:								
Less than once a year	27	37.0	11	16.2	7	9.9	45	21.2
1 - 5 times a year	26	35.6	20	29.4	23	32.4	69	32.6
6 - 11 times a year	8	10.9	8	11.8	11	15.5	27	12.7
1 - 3 times a month	5	6.9	14	20.6	13	18.3	32	15.1
Once a week or more	7	9.6	15	22.0	17	23.9	39	18.4
TOTAL	73	100.0	68	100.0	71	100.0	212	100.0
Chi Square 24.6 at 8 df; sig. .005 level								
Means	2.16		3.03		3.14		2.77	
C. Conferences, Etc., Attended Within School District During Past Year:								
None	9	12.2	8	11.6	11	15.3	28	13.0
1	10	13.5	4	5.8	17	23.6	31	14.4
2 - 3	15	20.3	18	26.1	24	33.3	57	26.5
4 5	8	10.8	12	17.4	7	9.7	27	12.6
6 - 10	22	29.7	13	18.8	8	11.1	43	20.0
11 - 15	4	5.4	9	13.1	2	2.8	15	7.0
16 or more	6	8.1	5	7.3	3	4.2	14	6.5
TOTAL	74	100.0	69	100.0	72	100.0	215	100.0
Chi Square 25.6 at 12 df; sign. .02 level								
Means	2.81		2.94		2.03		2.59	

Table D-18: Continued

Variables Compared With Location of Displays	Sites							
	Methuen		Boise		Hamilton		Total	
	N	%	N	%	N	%	N	%
D. Professional Meetings Attended Outside School District in Last Year								
None	8	10.9	25	37.3	10	13.9	43	20.3
1	4	5.5	12	17.9	9	12.5	25	11.8
2 - 3	23	31.5	12	17.9	29	40.3	64	30.2
4 - 5	15	20.6	4	6.0	11	15.3	30	14.2
More than 5	23	31.5	14	20.9	13	18.1	50	23.6
TOTAL	77	100.0	67	100.0	72	100.0	212	100.0
Chi Square 33.0 at 8 df; sig. .0001 level								
Means	2.56		1.55		2.11		2.09	
E. School Rank on Innovativeness Scale:								
Among last	1	1.4	3	4.6	9	13.4	13	6.3
Somewhat later than most	13	17.8	7	10.8	10	14.9	30	14.6
Average	27	37.0	19	29.2	15	22.4	61	29.8
Somewhat earlier than most	16	21.9	15	23.1	26	35.9	55	26.9
Among the first	16	21.9	21	32.3	9	13.4	46	22.4
TOTAL	73	100.0	65	100.0	69	100.0	205	100.0
Chi Square 20.4 at 8 df; sig. .005 level								
Means	3.45		3.68		3.21		3.44	

Table D-19: Table of Values for Figuring Interval Estimates for Percentages in Tables D-1 Through D-18

Values To Add To Sample Percentages To Set Limits Within Which Population Percentage Would Fall At 95% Level of Confidence For Selected Numbers of Respondents And Percentages

Values of *p or q	Numbers of Respondents					
	25	36	49	64	100	200
10% - 90%	±11.8%	± 9.8%	± 8.4%	± 7.4%	±5.9%	±4.2%
20% - 80%	±15.7%	±13.0%	±11.2%	± 9.8%	±7.8%	±5.5%
30% - 70%	±18.0%	±15.0%	±12.8%	±11.2%	±9.0%	±6.3%
40% - 60%	±19.2%	±16.0%	±13.7%	±12.0%	±9.6%	±6.8%
50% - 50%	±19.6%	±16.3%	±14.0%	±12.2%	±9.9%	±6.9%

*p = Percentage of respondents with characteristic being studied

*q = 100 - p or the percentage of respondents without the characteristic being studied

The values in the above chart may be applied to the percentages in the tables in Appendix D wherever the number of cases is listed on which the percentage is based. For example: In Appendix Table D-1, it may be seen that the sample value was 65.1% for the "No Action" category. That percentage was based on a sample of 215 persons from the population which it represents. Now looking in the chart above under 200 for the number of respondents and in the row containing 40% - 60%, the value (underlined) is ± 6.8%.

Applying that to the 65.1% indicates that we would expect that the percentage of "No Action" persons in the total population would fall between 58.3% (65.1 - 6.8) and 71.9% (65.1 + 6.8) in 95 out of 100 random samples drawn from the population.

This same procedure may be followed for other percentages and sample sizes appearing in tables in Appendix D.