A formative evaluation of a mediated program to facilitate communication between hearing parents and deaf children.

Allison Rossett
University of Massachusetts Amherst

Follow this and additional works at: http://scholarworks.umass.edu/dissertations_1

Recommended Citation
http://scholarworks.umass.edu/dissertations_1/2895
A FORMATIVE EVALUATION OF A MEDIATED PROGRAM TO FACILITATE COMMUNICATION BETWEEN HEARING PARENTS AND DEAF CHILDREN

A Dissertation Presented
by
Allison Rossett

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

May 1974

Media and Special Education
A Formative Evaluation of a Mediated Program to Facilitate Communication Between Hearing Parents and Deaf Children

A Dissertation

by

Allison Rossett

Approved as to style and content by:

Dr. H. Todd Eachus, Chairperson

Dr. Louis Fischer, Professor

Dr. Nancy Angrist Myers, Psychology Department

Dr. Emma M. Cappelluzzo, Dean's Representative

Dr. Dwight Allen, Dean
School of Education

April, 1974
ABSTRACT

A mediated program to increase and enhance communication between hearing parents and their deaf children was developed at the Northeast Regional Media Center for the Deaf. The form and content of this program, the design of the formative evaluation for this program, the results of this field testing of the program and the resulting changes in the program are described in this dissertation.

The two major mediated components of the program are a series of open-ended visuals and a print facilitator's manual. Designed to be used with small groups of parents of deaf children to create an environment in which parent behavior change will occur, the projective visuals stimulate individual verbal response by depicting parents and their deaf children at decision and/or interaction points in their relationship with each other. The facilitator's manual provides the leader with directions and ideas for the utilization of the open-ended visuals and with people, place and print resources of interest to parents of exceptional children.

The formative evaluation sought to examine the impact of the program on parent communication behavior change, and then to examine this change in light of the variables of facilitator type and communication methodology of the child's school. When
the results were examined for significant interactions, no
significant differences were found when the program was utilized
in an oral or total setting, or when facilitated by a parent
or an educator.

When parents exposed to NRMCD treatment were compared with
control parents, there were no significant differences in change
scores. The Communication Behavior Checklist demonstrated a
more positive impact. Results from this instrument showed that
in two out of the three treatment groups, the majority of parents
increased their frequency of selected communication behaviors.

When all parents who completed checklisting were examined, 63% showed frequency gains. The positive impact of the NRMCD
program supported by these findings was reiterated by the sub-
jective reactions of participating parents.

Based on analysis of variance data, checklist information
and parent and educator suggestions, changes in the form and
content of the NRMCD program have been undertaken. Four new
visuals and several new instructions sections for facilitators
have been added.
Acknowledgements

Hearing parents of deaf children and deaf adolescents were involved with this program from its inception. Their initial enthusiasm, their suggestions and constant feedback during the course of program development and field-testing have been central to the form and content of the Northeast Regional Media Center for the Deaf's program.

The NRMCD parent-child program and this dissertation have relied heavily on the suggestions, guidance and encouragement of the members of my dissertation committee. Dr. Louis Fischer, as a parent of a deaf adolescent and a professor at the School of Education, was involved in the generation of ideas and review of the visual portion of the program. Dr. Nancy Angrist Myers, a professor in the Psychology Department, painstakingly reviewed this dissertation and made essential suggestions for its improvement. Dr. Emma Cappelluzzo, the Dean's Representative and a professor at the School of Education, has been continuously and constantly supportive of me and my work on the NRMCD program. And Dr. H. Todd Eachus, chairperson of this dissertation committee, nurtured my interest in the initial phases of the program, advised me in the development of the program and the proposal for field testing and reviewed with me the organization and writing of this dissertation.

The field testing which is reported in this dissertation could not have occurred without the efforts of the four facilitators.
at the field test sites: Ms. Annette Baker, Ms. Esther Kaddaras, 
Mr. Ed Kisiday and Ms. Marion Fenton; and the Willie Ross School, 
The Framingham Learning Center, the Capitol Region Education 
Council and the Kendall Demonstration School.

For these past three years Dr. Raymond Wyman, as Project 
Director of the Northeast Regional Media Center for the Deaf at 
the School of Education, has warmly supported me and my work on 
this parent-child project. Sister Francis Solano offered pivotal 
suggestion in the design and analysis of this formative evaluation. 
Ms. Leah Hutten and Linda Cook provided me with essential assistance 
in the statistical analysis of the evaluation data. Ms. Jill 
Dardig and Mr. William Heward offered consistent and loving 
support as we all went through it together. And Ann Harris, who 
has typed and edited and organized, deserves acknowledgement for 
accurately anticipating my needs and the needs of this project.

My parents deserve acknowledgement at this time. If there 
was any possibility that I would forget that I had this dissertation 
to write, they erased that possibility. With each telephone con-
tact, they fondly nudged me back to the library carrel.

I very much want to thank all of these people for their help 
in my personal and professional growth.
# Table of Contents

Acknowledgements ............................................................... page ii
Table of Contents ............................................................. iv
List of Tables ................................................................. vi
List of Figures ................................................................. viii
List of Appendices ............................................................ ix

**CHAPTER I  INTRODUCTION** ............................................. page 1
- Background of the Study ................................................. 1
- Purpose of the Study .................................................... 13
- Definition of Terms ...................................................... 15
- Review of the Literature ............................................... 18

**CHAPTER II  METHODOLOGY** .......................................... page 38
- Subjects ........................................................................... 42
- Design and Procedures .................................................. 47
- Analyses of Data .......................................................... 49
- Questions of Internal Validity ......................................... 51
- Questions of External Validity .......................................... 53
- The Sites ........................................................................ 54
- In Summary ...................................................................... 59

**CHAPTER III  RESULTS** .................................................... page 60
- Purpose (1) ...................................................................... 61
- Purpose (2) and (3) ......................................................... 65
- Purpose (4) ...................................................................... 72
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Participants in Field Testing: Breakdown by Site and Treatment</td>
<td>39</td>
</tr>
<tr>
<td>B</td>
<td>Mean Gain Scores and Standard Deviations for Interaction of $M_1/M_3$ and Oral/Total</td>
<td>71</td>
</tr>
<tr>
<td>C</td>
<td>Mean Gain Scores and Standard Deviations for Interaction of Oral/Total and Parent/Educator</td>
<td>71</td>
</tr>
<tr>
<td>D</td>
<td>Mean Gain Scores and Standard Deviations for Interaction of $M_1/M_3$ and Parent/Educator</td>
<td>71</td>
</tr>
<tr>
<td>E</td>
<td>Results of the Communication Behaviors Checklist By Group - Frequency Change Over Time</td>
<td>76</td>
</tr>
<tr>
<td>F</td>
<td>Demographic Data for Parents in the $M_1$ Groups</td>
<td>92</td>
</tr>
<tr>
<td>G</td>
<td>Number of Children in the Families of $M_1$ Parents</td>
<td>93</td>
</tr>
<tr>
<td>H</td>
<td>Ages of Children of the Parents in the $M_1$ Population</td>
<td>94</td>
</tr>
<tr>
<td>I</td>
<td>Annual Combined Income for Parents in the $M_1$ Population</td>
<td>95</td>
</tr>
<tr>
<td>J</td>
<td>Last Completed Level of Education for Parents in the $M_1$ Population</td>
<td>96</td>
</tr>
<tr>
<td>K</td>
<td>Comparison By Groups of Parents' Perception of Speech as Major Problem</td>
<td>99</td>
</tr>
<tr>
<td>L</td>
<td>Comparison By Groups of Parents Who Identify Communication as Major Problem at Termination of NRMCD Program</td>
<td>100</td>
</tr>
<tr>
<td>M</td>
<td>Comparison By Groups of Parents Who Identify Communication as Major Program at Commencement of NRMCD Program</td>
<td>101</td>
</tr>
<tr>
<td>N</td>
<td>Mean Quantity and Type of Interactions for $M_1$ Groups</td>
<td>110</td>
</tr>
<tr>
<td>Table</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>O</td>
<td>Comparison By Groups of Making Subjective Responses to the NRMCD Program.</td>
<td>123</td>
</tr>
<tr>
<td>P</td>
<td>Comparison By Group of Percentage Responding Favorably, Unfavorably or Mixed to Program</td>
<td>124</td>
</tr>
<tr>
<td>Q</td>
<td>Most Enjoyable Features of the NRMCD Program As Identified By Parents in the M1OP Group</td>
<td>127</td>
</tr>
<tr>
<td>R</td>
<td>Most Enjoyable Features of the NRMCD Program As Identified By Parents in the M1OE Group</td>
<td>128</td>
</tr>
<tr>
<td>S</td>
<td>Most Enjoyable Features of the NRMCD Program As Identified By Parents in the M1TP Group</td>
<td>128</td>
</tr>
</tbody>
</table>
## List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ratings of Mother-Child Interaction</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>The $3 \times 2 \times 2$ Factorial Design</td>
<td>45</td>
</tr>
<tr>
<td>3</td>
<td>Grand Means for Entire Population. Means for Main Effects: $M_1$ vs. $M_3$</td>
<td>62</td>
</tr>
<tr>
<td>4</td>
<td>Means for Main Effects for Oral vs. Total Groups and Parent vs. Educator Groups.</td>
<td>69</td>
</tr>
<tr>
<td>5</td>
<td>Mean Gain Scores: $M_1$, $M_3$, Oral, Total, Parent, Educator</td>
<td>70</td>
</tr>
<tr>
<td>6</td>
<td>Average Frequency of Parent Behavior Per Question for $M_1$OP Group.</td>
<td>77</td>
</tr>
<tr>
<td>7</td>
<td>Average Frequency of Parent Behaviors Per Question for $M_1$OE Group.</td>
<td>78</td>
</tr>
<tr>
<td>8</td>
<td>Average Frequency of Parent Behaviors Per Question for $M_1$TP Group.</td>
<td>79</td>
</tr>
<tr>
<td>9-36</td>
<td>Total Frequency of Twenty-two Individual Parents Selected Communication Behaviors Per Week.</td>
<td>80</td>
</tr>
<tr>
<td>31</td>
<td>Major Problem(s) of Hearing Parents of Deaf Children as Perceived By Those Parents at the Commencement of the NRMCD Program.</td>
<td>98</td>
</tr>
<tr>
<td>32</td>
<td>Breakdown of Communication As The Major Problem Perceived by Parents at the Commencement of the NRMCD Program.</td>
<td>98</td>
</tr>
<tr>
<td>33-4</td>
<td>Selection of Questions By $M_1$ Parents For the Communication Behaviors Checklist.</td>
<td>107</td>
</tr>
<tr>
<td>Appendix</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>I</td>
<td>Selections From the NRMCD Program.</td>
<td>161</td>
</tr>
<tr>
<td>IA</td>
<td>Selected Visuals.</td>
<td>162</td>
</tr>
<tr>
<td>IB</td>
<td>Corresponding Selections From the Facilitator's Manual.</td>
<td>170</td>
</tr>
<tr>
<td>II</td>
<td>Instrumentation.</td>
<td>187</td>
</tr>
<tr>
<td>IIA</td>
<td>Interaction Descriptor.</td>
<td>188</td>
</tr>
<tr>
<td>IIB</td>
<td>Demographic Data Sheet.</td>
<td>190</td>
</tr>
<tr>
<td>IIC</td>
<td>Earlier Pre/Post-test.</td>
<td>191</td>
</tr>
<tr>
<td>IID</td>
<td>Early Pre/Post-test.</td>
<td>202</td>
</tr>
<tr>
<td>IIE</td>
<td>The Pre/Post-test Instrument and Directions.</td>
<td>209</td>
</tr>
<tr>
<td>IIF</td>
<td>Early Communication Behaviors Checklist.</td>
<td>224</td>
</tr>
<tr>
<td>IIG</td>
<td>The Communication Behaviors Checklist Questions and Recording Form.</td>
<td>229</td>
</tr>
<tr>
<td>IIH</td>
<td>Open Forum Questions.</td>
<td>236</td>
</tr>
<tr>
<td>III</td>
<td>Summary Tables for the Analyses of Variance</td>
<td>240</td>
</tr>
<tr>
<td>IIIA</td>
<td>Summary Table for the Analysis of Variance of Gain Scores: $M_1/M_3$ and Oral/Total</td>
<td>241</td>
</tr>
<tr>
<td>IIIB</td>
<td>Summary Table for the Analysis of Variance of Gain Scores: Oral/Total and Parent/Facilitator</td>
<td>241</td>
</tr>
<tr>
<td>IIIIC</td>
<td>Summary Table for the Analysis of Variance of Gain Scores: $M_1/M_3$ and Parent/Educator</td>
<td>242</td>
</tr>
<tr>
<td>IIIID</td>
<td>Summary Table for the Analysis of Variance of Parent-Facilitator Interactions for $M_{1OP}$, $M_{1OE}$ and $M_{1TP}$</td>
<td>243</td>
</tr>
<tr>
<td>IIIIE</td>
<td>Summary Table for the Analysis of Variance of Parent-Parent Interactions for $M_{1OP}$, $M_{1OE}$ and $M_{1TP}$</td>
<td>243</td>
</tr>
</tbody>
</table>
IIIF Summary Table for the Analysis of Variance of Individual Total Interactions for M1OP, M1OE and M1TP ........................................ 244

IV Tables of Parent Response to Individual Pre and Post-test Questions .......... 245

IVA % of Parent Response To Each Question for All Groups on the Pre and Post-tests. 246

IVB % of Above 25% Response to Individual Questions By Parents on the Pre and Post-tests ........................................... 247

IVC % of Below 10% Response to Individual Questions By Parents on the Pre and Post-tests ........................................... 248

IVD Comparison of Above 25% Percentages for M1 Groups for Individual Questions on the Pre and Post-tests ....................... 249

IVE Comparison of Below 10% Percentages for M1 Groups for Individual Questions on The Pre and Post-tests ......................... 250

IVF Comparison of Above 25% Percentages for M3 Groups for Individual Questions on the Pre and Post-tests ......................... 251

IVG Comparison of Below 10% Percentages for M3 Groups for Individual Questions on the Pre and Post-tests ......................... 252

IVH Comparison of Change from Pre to Post-test for Individual (Above 25%) Questions in M1 vs. M3 Groups and Oral vs. Total Groups 253

IVI Comparison of Change from Pre to Post-test for Individual (Below 10%) Questions in M1 vs. M3 Groups and Oral vs. Total Groups 254

IVJ Comparison of Above 25% Percentages for Individual from Oral Communication Groups on the Pre and Post-tests ......................... 255

IVK Comparison of Below 10% Percentages for Individual Questions from Oral Communication Groups on the Pre and Post-tests..... 256
IVL  Comparison of Above 25% Percentages for Individual Questions from Total Communication Groups on the Pre and Post-test..... 257

IVM  Comparison of Below 10% Percentages for Individual Questions from Total Communication Groups on the Pre and Post-tests.... 258

V  Changes In and Additions to the NRMCD Program.............................. 259

VA  New Visuals................................. 260

VB  Changes In and Additions to the Facilitator's Manual.......................... 264
CHAPTER I

INTRODUCTION

Background of the Study. In the fall of 1971 the Northeast Regional Media Center for the Deaf, a federally funded Office of Education, Bureau for the Education of the Handicapped project, hosted 14 deaf adolescents from schools in the northeast. They had been invited to advise the Northeast Regional Media Center for the Deaf (hereafter NRMCD) on project priorities, to suggest areas in which they felt materials and programs should be concentrated. They were very explicit about their needs and the direction NRMCD efforts should take. Clearly and directly, they made these statements:

"My parents don't know how to communicate with me."
"My parents are overprotective."
"My parents are ashamed of me. They send me to spend weekends with my friends who have deaf parents."
"My parents don't understand me."
"I can't understand my parents."
"My parents should show more love."
"If we can learn to communicate better, then everything will be O.K."

The deaf adolescents wrote, signed and/or spoke a message which left little room for confusion. They urged the development of a program to improve communication between hearing parents and their deaf children.
NRMCD accepted the students' mandate and began to examine the problem through discussions and conferences with parents, educators and counselors of deaf children. All of these individuals shared the adolescents' concerns and provided specific insights into issues of parenting, parenting and deafness, and the resulting unique communication interaction.

Since parents are every child's initial link with the world, they create the environment which influences the child's learnings and provide the experiences which shape the child's behaviors. It is this shaping, this providing, this responsibility for environment which justifies and necessitates a focus on parents and their concerns.

Parents are educators. Just as society expects carefully considered goals, content and strategies from its salaried educators, society must expect the same thought and planning from parents. A baby is born. A baby enters the home. The parents meet, greet, and raise the child. Often, this "raising" proceeds with little introspection, instruction or evaluation.

Parents usually do what their parents have done. This repetition of their parents' behaviors does not cause the problem; the problem is caused by some parents' failure to examine their parenting behaviors and the failure to measure these behaviors against some goals.

Most parents love their children. Many of these loving parents consistently and effectively communicate with their children. They know the direction in which they want their children to travel and have
thought about and carried out some processes which will enable their children to get to these objectives. It is essential that parents, teachers, administrators and professionals recognize the potential and actual effectiveness of many parents while simultaneously assisting parents to see themselves as resources.

The very young deaf child relies more on his parents than does his hearing peer. He will turn to his parents for help with all of the unknowns that are more easily inferred by a hearing child through supplementary contacts. He will turn to his parents for the fun and games and language that other children receive from constant interaction with varying people. He will turn to his parents for the experiences that his youth and deafness make difficult. Sesame Street, the soap operas, and the neighborhood kids cannot be expected to provide the deaf child with the stimulation that a parent fails to provide.

It is the interaction between a young deaf child and his parents which provides the language base, the learning behaviors and the feelings about self which enable intellectual and social growth to occur. The parents of a deaf child can learn to improve this interaction. It is essential that the parents undertake this learning.

The communication between the deaf child and the hearing parents is the child's basis for growth. There are some familiar communication problems which occur between parents and their hearing children. These communication problems are heightened when deafness is introduced into the communication situation. The parent of a deaf child must be aware of the nature of these heightened communication problems. He or she
must recognize that they occur in the most usual of family locations: at the dinner table, at bedtime, at relatives' homes. And while recognizing the pervasiveness of these breakdowns, this same parent must acquire the techniques and skills which will enable him or her to overcome these problems. Deafness makes the sharing of thoughts, ideas and feelings difficult. Deafness does not make this communication impossible.

For many hearing parents and their deaf children, unsuccessful communication begins with the child's birth. The child is deaf and the child will not respond to the single, isolated stimulus of the mother's or father's voice. The parent gets no response to greeting or singing or bantering and therefore stops or limits this behavior with the child. Very early, usually far before a diagnosis of deafness is obtained, the parents have begun to make fewer verbal communication overtures to their child.

After the diagnosis of deafness, the parents are at a loss as to what to do next. They are not consciously aware of the communication techniques which they have been using with hearing people, and they do not know how to modify, adjust and supplement these techniques for their deaf child. Some parents continue to do what they have been doing: they talk, they shout; they get angry and they get physical about their anger. They realize how little the child is understanding and feel guilt at not being able to make themselves understood. The child never understands the spoken message; and the child never understands the grimaces and slaps which demonstrate the parents' angers.
That is one possible and frequent model for communication between hearing parents and deaf children.

Fortunately, there are parents who do learn varied and effective means of communication with their deaf child. It is these parents who are most successful at cementing a relationship with their child and in providing the pivotal language experiences. A pattern is set. And this pattern can yield frustration or joy for the child and for the parent. If communication is blocked, neither one is able to send or receive the vital messages which tie them to each other and which tie the child to the world. Yet if communication is facilitated, this essential message sharing will enrich all of their lives.

The student, parent, educator, counselor and NRMCD concerns and ideas were translated into a commitment to create a mediated program to facilitate communication between hearing parents and their deaf children. That mediated program, reflecting NRMCD interaction with expert people and with a body of research and literature related to parent education, exceptionality and deafness, has now moved from a commitment to a tangible product.

In August 1973, the Northeast Regional Media Center for the Deaf completed the initial development phase of the project. A program to facilitate communication between hearing parents and their deaf children had been developed and needed formative scrutiny.

The major components of this program are the following:

1. Stimulus, open-ended visuals; (Appendix I A)\(^1\)

\(^1\) Selections from the visuals and the facilitators manual are provided in Appendix I.
2. A facilitator's manual; (Appendix I B)

3. Parent groups;

4. Parent education via group leadership by parents, guidance counselors, administrators and teachers;

5. Parent self-evaluation via parent checklisting of communication behaviors; and


A brief description of the major components of the NRMCD parent-child communication program follows:

1. Stimulus, open-ended visuals.

   Stimulus visuals are materials which precipitate rather than complete the educational process. They are important not for what they are, but for what they begin in the group which views them. The visuals provide no answers; rather they provide the impetus for individual answer-finding or additional question-posing. The open-ended, unresolved format utilizes the basic communication situations universal to families with a deaf child while encouraging individual suggestions for parent communication behaviors. The open format enables parents to feed their own concerns and successes into the open situations and creates an environment where parent reaction to the ambiguous visuals will give information about these parents' unique cognitive and affective concerns and/or successes.

   The open-ended visuals concentrate on creating an environment for bringing about changes in parent behaviors with their deaf
children. They do this by serving as prompts for verbal behavior. The 45 visuals stimulate varying kinds of responses from the parents who view them: "When that happened, I..." "Do you think you should...?" "I feel... when I look at them." "That has never happened in our home and I wonder why..." "Maybe you should try to..." "I see... going on in that picture. What do you see?" This verbal behavior includes comment about feelings and suggestions for specific actions parents can take to deal with their special concerns. While assuring the prompting of verbal behavior, the visuals also systematize verbal behavior on selected themes and problems.

There is an acknowledged and almost universal progression of experiences and concerns faced by parents of deaf children. These experiences and concerns were reiterated by the educators of the deaf, the deaf adolescents and the parents who served as resources in the development of the program. Visits to parent groups yielded graphic descriptions and poignant discussions of key moments and interactions in their parenting of their deaf child. These moments and interactions were translated into the discussion stimulating visuals which serve as the basis for the program. A visit with a parent group at the Robbin's Speech and Hearing Clinic was typical of the way the ideas for the open-ended visuals were generated. They talked about restaurants and their child's temper tantrums and their concern about the people associating the annoying tantrum behavior with the deafness. Their choice of deciding to put the hearing aid on the child or deciding not to put the aid on the child caused them considerable pain -
and evoked discussion of discipline, public reaction to deafness, necessity for amplification and the self-concept of the deaf child. Another similar and meaty discussion was about blindness and deafness. The six mothers in the room were evenly split on the subject of which was the most debilitating handicap. Crucial issues were raised here: what is the impact of deafness on the child? What are the functions of a child's hearing? What is the likely impact of congenital deafness as compared to adventitious deafness? What do individual parents feel about deafness and how do they communicate these feelings to their child? Another area highlighted by the Robbins group was responding to strangers' questions about deafness generated by the young child's hearing aid. They described incidents in supermarkets, trains and playgrounds and they asked important questions: What should I say? Why do people ask these questions? What is the germane information that I should impart? Why do I feel anger at these people? Should I tell my child about the questioning? Should I invite the child to respond if she/he is capable of responding?

These are three examples of parent discussion and description of incidents; visits with many other parent groups provided additional material. The incidents they all described resulted in ideas about parent concerns and the generation of visuals which depict these concerns. Once in systematized visual form, they stimulated parent verbal behavior or behavior rehearsal related to improved interaction with their deaf children.

Deaf adolescents were another source of ideas for the visuals.
Their suggestions for this project were elicited in a structured fashion. They were asked to respond to these open-ended questions: (1) I am happiest with my parents when we...; (2) I am saddest with my parents when we...; (3) A happy time that I can remember was when we...; (4) A sad time that I can remember was when we... Their responses suggested many important moments and incidents in their interactions with their parents. They wrote about mealtime, telephone conversations with distant relatives, family parties, sibling privileges in which they could not participate, curiosity over television newscasts, and social relationships with hearing peers. Their descriptions of parent-child interactions surrounding key issues provided the impetus for many other visuals.

The needs and concerns of parents and deaf children serve as the themes for the visuals. These visuals elicit the inter-parent behavior likely to bring about change in the parents' communication with their deaf children. The focus is on process; the focus is on parents helping themselves and other parents to improve the quality and quantity of their interactions with their deaf children. This improvement comes out of the discussion stimulated by the visuals and the direction provided to the leader by the facilitator's manual.


The facilitator's manual enables someone who is unfamiliar with the visuals, but who knows something about deafness and/or parent education and/or being the parent of a deaf child, to lead a group of parents towards an increase in communication skills. The
Manual discusses each visual in light of the basic visual content, the questions facilitators should raise (both affective and cognitive), the parent concerns and reactions touched on in the visual, and the parent communication behaviors applicable to the situation.

Implementation of the visuals is a challenging task. Because the materials draw upon individual and therefore, unique parent reaction, the leader contends with the diversity and the wealth of all the responses which the different situations yield. The manual enables the leader to anticipate this varying parent input. It also offers suggestions to help evoke discussion of communication behaviors in the depicted situations. The facilitator's manual suggests, directs, structures. Random discussions stimulated by the visuals could possibly lead to more effective parent-child communication. The facilitator's manual is designed to cut down on the "could possibly" elements by carefully listing what the visuals are intended to do and various ways for getting to those intentions. The leader and the group members can make choices based on: (1) the visuals and their order and presentation; (2) the communication and behavior objectives; (3) the topics for discussion; (4) the activities and group tasks; and (5) the group leadership style. All of these choices can be made with a clear picture of the nature of the larger program and the individual visuals as learning experiences. The manual provides this picture.


The utilization of these materials (visuals and manual) relies
totally on the creation and maintenance of a parent group. This form of learning opportunity is based on a strong belief in the ability of parents to educate other parents and in the importance of parents becoming an affective and cognitive information resource group for each other and for professionals.

4. Parent education via group leadership by parents, guidance counselors, teachers and administrators.

Discussions with parents, deaf adolescents, administrators and teachers strongly suggested that programs could be effectively led by parents, as well as by the traditional school leadership. The facilitator's manual is written for parents and school people. It respects the expertise which the parents of a deaf child acquire through the process of being a parent of a deaf child. It also encourages teachers, counselors and administrators to continue and improve their efforts. Data on the effectiveness of parents as group facilitators is provided in Chapters III and IV of this document.

Very specific descriptions of group activities, utilization techniques for the visuals and maintenance and supportive behaviors are listed in the manual. The manual emphasizes a task orientation (e.g. listing hearing pre-school programs in your area which are sensitive to the needs of deaf youngsters), the creation of a supportive group environment and the introduction of specific suggestions for changes in communication behaviors.

5. Parent self-evaluation via parent checklisting of communication behaviors.
Because the visuals are designed to change what parents actually do in their homes with their deaf children, there are accompanying checklists. These checklists ask the parent to indicate the frequency of certain communication (vocal and non-vocal) behaviors. They enable the parent to look at himself/herself at the beginning, during and at the termination of the program. This consistent self-evaluation should provide more transfer of learning between parent group sessions and home communication behaviors.


Parents need to know where to go for information about deafness. Parents need to know how to become more knowledgeable about deafness, so that they can begin making informed decisions for their young deaf child. This section of the facilitator's manual responds to these needs. Parents are provided with annotated information on print, place and people resources on exceptionality, parent education and deafness. A geographical listing of parent education programs for parents of deaf children is also provided.

The Northeast Regional Media Center for the Deaf's program (as detailed in #1-6) is intended for use in schools for the deaf, local, state and regional groups of parents of deaf children and speech and hearing clinics. In response to the needs articulated by deaf adolescents, their parents and professionals in the field, it is designed to increase communication between hearing parents and their deaf children.
Purpose of the Study. This document describes the field testing of the NRMCD parent-child communication program. This field testing entailed the placement of NRMCD materials and procedures in actual settings. This placement in actual settings and the observation and measurement of the program in these settings was for the following purposes:

(1) To look at the impact of the NRMCD program in light of the Parent-Child Communication Task Force's operationalization of "to facilitate communication between hearing parents and their deaf children" as expressed in Part IV of the facilitator's manual, Parent Behaviors;

(2) To measure parent-child communication behaviors in these varied and usual settings;

(3) To gain information in order to make some predictions about the effects of utilizing the NRMCD program in parent groups and in parent groups of a particular nature (total or oral methodology and educator or parent facilitated);

(4) To measure the impact of the NRMCD program in light of its ability to bring about an increase in frequency of parent-selected communication behaviors with their deaf children;

(5) To gather information on parents who attend these parent education sessions and to ascertain what they perceive as their major problems with their deaf children;

(6) To measure the NRMCD program's effect on group processes in varied and usual settings;
(7) To make generalizations about areas of communication strengths and weaknesses as perceived by parents of deaf children;

(8) To utilize this evaluative information to make generalizations about the strengths and weaknesses of the program;

(9) To determine the impact of the NRMCD parent-child communication program on the communication behaviors of hearing parents of deaf children; and

(10) To alter the NRMCD program to facilitate communication between hearing parents and their deaf children so that it reflects the data gathered during this field testing.

Purpose (1) through (8) will be addressed in Chapter III. Purposes (8) and (9) are central to Chapter IV.
Definition of Terms. The following terms appear in the dissertation and might be open to varying interpretations:

Deafness: In this study, "deafness" or the state of being deaf is used to describe those in whom the sense of hearing is non-functional to conduct the ordinary interactions and exchanges in daily life. The deaf are those whose hearing loss interferes with their ability to communicate as the hearing majority of the population communicates. In this study the deaf are most often those who are born with greater than a 80dB+ loss or suffer it prior to the firm establishment of speech and natural language. Simply, the deaf children of hearing parents described herein are children who cannot learn through the usual/ordinary parenting and communication behaviors. These deaf children need special skills and techniques to approach their potential.

Hearing Impaired: In this study, attempts have been made not to use this euphemism for "deafness". When indicating a less than 80dB loss in the speech range, individuals are described as being mildly or moderately hearing impaired. Those with a mild or moderate hearing loss experience some difficulties in auditory reception but not complete or almost complete non-function. Training and amplification almost always enable the mild or moderately hearing impaired to rely on audition for message exchange.

Communication: The transfer of ideas, information or emotions. The exchange of messages.

Parent-Child Communication: In this study, parent-child communication is defined as the transfer of ideas, information and
feelings between hearing parents and their deaf children.

Parent(s): They are those individual(s) who are primarily responsible for making decisions which directly influence the deaf child. They must answer questions like: "To whom shall I go for information about why my 2 1/2 year old isn't talking yet?" "Can my deaf daughter go to nursery school with hearing children?" "What communication methodology shall I choose for my child?"

Communication Methodology: A "communication methodology" is the chosen means by which the deaf individual communicates and therefore learns. This choice of means is usually made by the parent or the parent-surrogate and will be one of the primary factors in the choice of a school for the child. When mentioned in this study, it usually suggests a discussion of one of the systematized information, idea and emotion transfer systems: oral communication or total communication.

Oral Communication: This communication methodology states that deaf children's (and adults') means of sending out messages should be through speech and that their means of receiving messages should be through lip reading. Those who advocate oralism (oral communication for the deaf) emphasize early parent training, early oral education and eventual integration into the hearing community.

Total Communication: This communication methodology encourages deaf children (and adults) to utilize speech, lip reading and fingerspelling and the language of signs to send and receive messages. Advocates of total communication emphasize language
acquisition and do not value signs or lip reading as the more valid or essential communication methodology.
Review of the Literature. The NRMCD program to facilitate communication between hearing parents and their deaf children is based on broad assumptions. These assumptions were derived from interactions with parents, teachers and administrators of the deaf, psychologists and social workers for the deaf and an extensive review of the literature in parent education, parent-child communication, deaf education, and operant procedures as applied to parent education.

It is useful to look at the NRMCD program through these assumptions and to detail the related and substantiating literature. These are the five basic assumptions:

(1) That parent input is essential to a child's growth;

(2) That deafness has an enormous impact on the relationship between the hearing parents and the deaf child;

(3) That parent-child communication is the vehicle for essential parent input and response to the deaf child's needs; that this communication is greatly affected by deafness;

(4) That a parent education component has been and should be effectively, widely and diversely integrated into early childhood and special education efforts;

(5) That effective parent education (i.e. education which will yield an increase in the selected parent and/or child behaviors) can be brought about through a focus on parent and child behaviors and parent education in behavior modification. The following review of the literature is organized around the preceding assumptions.

In the 1920s, in a time of spangles and flappers and economic prosperity, the State of California's Department of Education encouraged local school boards to integrate parent education into their curricula. A California Department of Education Bulletin emphasized
that "organized study by fathers and mothers and teachers is essential to effective articulation of the many phases of education in our lives." Responding to the California impetus and the hypothesized relationship between parents and rising rates of juvenile delinquency, in 1932 the White House funded a White House Conference on Child Health and Protection, which focused on forms and contents for parent education. A national conference and its acceptance of assumption (1) that parent input is essential to a child's growth failed to yield an organized and widespread application of the social and behavioral sciences to concerns of parents and children. Efforts were diffused into Parent Teacher Associations, organizations which consistently emphasized the school and the home's support of classroom instruction while minimizing the actual and potential role of the parents as socializers/educators. Studies on the potential for learning within the home, between the parent and the child, were not undertaken at that time. Local, state and federal governments ignored the only major study in this area done at that time (Rogers, 1939). Carl Rogers' investigations into the treatment of the "problem" child strongly emphasized that prediction of the likelihood of success of a particular treatment should be based not on what was said or done with the child in treatment, but rather on the way the parents act towards the child and the resulting "emotional climate" of the home.

The mid and late 1940s brought renewed interest in the parent's impact on the child. Unfortunately, the initial research which recognizes this impact is deprivation-oriented. Because of the
difficulty of isolating the parent (usually mother) as a dependent variable, most of child and special child development efforts have been concentrated on the impact of the absence of the parent/mother.

Spitz (1945, 1946) and Bowlby (1952) carried out early research on maternal input into the child's development. Spitz' work investigated the absent mother and the effect of her absence on cognitive functioning. He reports a significant fall off in academic competence in children with absentee mothers. Bowlby goes even further in trying to isolate the deleterious effects of an absent mother on her children. He hypothesizes a special attachment between mother and child, without which the child will be cognitively and affectively scarred. Even though handily discredited by Wortis (1970), this Bowlby Attachment Theory and its findings of severe academic and personal problems in institutionalized children (thus children without individualized parenting) does highlight the primacy of that early adult-child contact. While questioning the Bowlby and Spitz fixation on female responsibility for nurturance, two additional researchers (Casler, 1961; Ainsworth, 1962) reiterated the essential nature of the primary adult or parent's role in the child's development. By the 1960s the implication was clear. Parents, the adults central to the child's early environment, could seriously harm the child by their absence. Minimal powers of inference could have then led legislators and educators to reckoning with and acting upon the positive potential of parents for their children.

It did not happen that way. As Snadowsky (1973) points out, in
the early 1960s, educators' interest in the antecedents for learning competence moved from the home to the culture. So did the funding. Individual parents, their homes and their child-rearing were seen as one part of a larger, amorphous and deprived (or not deprived) culture. Into that amorphous and deprived culture came compensatory transfusions of middle class emphases. Occasionally even, when Head Starts just didn't provide the promised leaps in readiness scores, cursory and judgmental interest (Baratz and Baratz, 1970) was directed towards the child-rearing techniques (or non-techniques) of those other cultures.

By the late 1960s and early 1970s, ethnic power and accountability groups and a Federal administration unfriendly to sweeping poverty and education programs created an entirely different climate. Within this climate and while acknowledging the obvious potential impact of parents on their children, research and fellowship funding began to flow to parent educators. The conception of a nebulous culture changed to a focus on specific parents with specific children working on specific, selected behaviors. The behavior modifier provided additional support to the contention that parent input is essential to the child's growth.

There are hundreds of examples of the effectiveness of parents operating as behavior modifiers. These examples demonstrate the procedures used with children or by trainers with parents, for subsequent application with children - all directed towards a general goal of aiding the child to adapt more appropriate behaviors, behaviors
likely to bring reinforcement in home and other settings.

Zeilberger et al. (1968), Johnson (1971) and Christophersen et al. (1972) are examples of the potency of this form of parent input. In all three studies, parents selected inappropriate and/or ineffective and/or destructive child behaviors and taught their children new, appropriate and/or effective and/or constructive behaviors. More significant than the teaching was the learning by the children. They consistently adopted the selected behaviors, thus substantiating the actual impact of parents on their children and hinting at the potential impact derived with more universal parent education (Hawkins, 1971).

"The challenge is to extend the work of education from a classroom perspective which focuses on the child's learning academic subjects in the classroom with professional educator to a life-time and life-space perspective which extends from birth onward." (Schaeffer, 1973) For the non-exceptional child, for the child who can be sufficiently (if not excellently) educated by mainstream approaches, this emphasis is important. For the exceptional child, the child who is likely to have fewer sources of input and stimulation, this focus on parents and continuous education is crucial.

The initial impetus for the NRMCD program, the concern of deaf adolescents about their relationships with their hearing parents, has been reiterated by teachers, counselors, social workers and parents of the deaf. A review of the literature by experts in clinical psychology and its applications to the educator and mental health of the deaf
yielded these pointed statements:

The socialization of a young child calls for infinite patience on the part of the parents under the best of conditions. When the child is handicapped, and the handicap inhibits communication, the patience demanded of the parent is increased many times. (Schlesinger & Meadow, 1972)

Another theory which I think is important in the relationship of parent to child in the presence of deafness is the misguided advice that parents often get, to the effect that they should not use any type of language with the child except speech. In the end this amounts to what you might call a double bind, when the message is I won't communicate with you (the child) because I love you and ultimately want you to be able to learn to speak. Actually, however, this attitude can make for a separation between parent and child if carried to an extreme. (Altshuler, 1967)

Discipline, often difficult for any parent of a toddler, is even more arduous for parents who have recently learned of a hearing loss. (Mira, 1972)

The deaf child, because he must depend on communication of a non-verbal nature, remains more dependent on the mother than the normally hearing child. His is a forced dependence born of an inability to develop conventional communication. This inability forces him to depend on the actions, not the words, of the few people with whom he is familiar. He must approach strangers cautiously. Often they provide him with little or no novel learning opportunity, for rarely can they handle with ease the difficulties inherent in activities and communication with a deaf child. (Mindel and Vernon, 1971)

Contact with many deaf adults, deaf children and their hearing parents enabled professionals to make the preceding generalizations. These statements substantiate the assumption (2) that deafness has an enormous impact on the nature and quality of the relationship between hearing parents and their deaf children. Parents of deaf children
are only now beginning to echo the concerns of their children about unsatisfactory interaction in the home. Fortunately the parents' reiteration of these special concerns is leading to attempts to define the exact nature of their interaction and to develop programs to remediate the problem (the NRMCD program is such an effort). Considerable specific research has now been directed toward analyzing hearing parent-deaf child communication.

The third assumption that parent-child communication is the vehicle for essential parent input and response to the deaf child's needs and that this communication is greatly affected by deafness is borne out by several researchers in deaf education.

As we have reiterated, the primary handicap imposed by early childhood deafness is that it jams and weakens communication between the child and others in his environment. The deaf child's inability to respond fully to parently communication may be compared to what Erikson has called the deficiency in 'sending power' in the schizophrenic child. (Schlesinger and Meadow, 1972)

This general statement is now supported by the work of many researchers in communication and deafness. (Stevenson, 1964; Stuckless and Birch, 1966; Rainer and Altshuler, 1967; Goss, 1970; Lytton, 1971; Mindel and Vernon, 1971; Koh, 1971; Simmons-Martin, 1972; Altman, 1973). The work of Mindel and Vernon and Rainer and Altshuler provides a basic picture of the angst involved in communication between hearing parents and deaf children. Goss, Altman, Simmons-Martin and Schlesinger and Meadow have provided specific research describing the interactions which occur in a home with a deaf child.
Their work sheds additional light on the shape and strength of the intrusion that deafness makes within a home.

Goss (1970) compared the language used by mothers of hearing children with the language used by mothers of deaf children. He found that the mothers of hearing children were more likely to ask questions, to ask for opinions and to use language showing solidarity and agreement. On the other hand, he found that the mothers of the deaf children were more likely to show disagreement, to appear tense and to make suggestions. These mothers of the deaf were not as likely to use verbal praise as were the mothers of hearing children. Considering the impact of parents in stimulating language growth through their own verbal language (Davitz, 1966; Levenstein and Sunley, 1967), there is obvious importance in these major differences in parental communication with deaf and hearing children.

Simmons-Martin (1972) observed mother-infant interaction in homes of hearing children and listed the magnitude of their occurrence. From the most frequently occurring to the least frequently occurring, she listed the following activities: holding, talking, talking to infant, feeding, and looking at face. Simmons-Martin finds that in a home with a deaf infant, the talking and the talking to the infant are likely to be extinguished. The deaf child fails to provide the pivotal reinforcement for that important form of parent-child communication.

A study by Altman (1973) focused on ten deaf children. She used professionals to rate the children on their communicative competence.
Altman's findings were that the mothers of the children rated as less competent were distinguished by their one or two word utterances and that these same mothers gave out more facts and information than did the mothers of the children rated as more competent communicators. Mothers with children rated as more competent tended to speak more frequently and had more to say when they did speak.

Schlesinger and Meadow (1972) have devoted a good portion of their book *Sound and Sign* to this concern. From counseling sessions with parents and home observations, they state that hearing parents of deaf children using total communication rely on an abundance of tactile stimuli and frequently run toys and fingers over the deaf child's face and head. They have often observed parents making signs right on the infant or child's body. In a comparison study of maternal interaction with hearing parents of deaf children and hearing children (see Figure 1), Schlesinger and Meadow found highly significant differences in interaction behaviors. Mothers of deaf children were rated as significantly less flexible, permissive, encouraging and imaginative. The mothers of deaf children were also rated as significantly more intrusive and didactic. These blatant and major differences in communication and child-rearing patterns were definitely related to the deaf child's communication deficit. When the 60 mothers' backgrounds were screened for significant personality characteristics, education or ethnic variables, the pattern still pointed to deafness as being the sole and primary distinguishing variable.

If, as these researchers have documented, deafness does make a
telling impact on the communication interaction patterns in a home with a deaf child, the next question must relate to possible directions for remediation. From the findings of Schlesinger and Meadow (1972), Altman (1973), Quigley and Frisina (1961), Stuckless and Birch (1966), Stevenson (1964), Vernon and Koh (1970), House and Fitch (1972), and Brill (1960, 1969) one can draw some pragmatic suggestions. These suggestions are directly influenced by their individual commitment to a total or oral communication methodology. Still a review of their findings yields a combination of inferences for new programs based on their works.

From an oralist's perspective, the Altman study describes the characteristics of mothers of deaf children rated as being highly competent communicators. She found that mothers of the more competent children corrected their children more often. They also made more frequent repetitions of sentences and words for the deaf 4-7 year olds in the study. These same mothers asked more questions of their children and the children responded more often to their mother's queries. In general, Altman found that the mothers of the more competent communicators offered more feedback to the children, placed more pressure to excel on the children, used more positive reinforcers, manifested more positive affection and warmth and introspected more frequently on their performance as mothers of deaf children. Based on her observations, a program, even a total communication program, should be aimed at evoking or increasing the frequency of the described parental behaviors.
Figure 1.
RATINGS OF MOTHER-CHILD INTERACTION
Comparison of Mothers of Deaf and Mothers of Hearing Children

<table>
<thead>
<tr>
<th></th>
<th>Hearing children</th>
<th>Deaf children</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible</td>
<td>30%</td>
<td>90%</td>
<td>*** p &lt; .001</td>
</tr>
<tr>
<td>Infrequently didactic</td>
<td>36% +</td>
<td>85%</td>
<td>** p &lt; .01</td>
</tr>
<tr>
<td>Permissive</td>
<td>40%</td>
<td>85%</td>
<td>** p &lt; .05</td>
</tr>
<tr>
<td>Non-intrusive</td>
<td>37%</td>
<td>79%</td>
<td>* p &lt; .05</td>
</tr>
<tr>
<td>Encouraging, approving</td>
<td>34%</td>
<td>75%</td>
<td>* p &lt; .05</td>
</tr>
<tr>
<td>Creative, Imaginative</td>
<td>35%</td>
<td>70%</td>
<td>* p &lt; .05</td>
</tr>
<tr>
<td>Much enjoyment of child</td>
<td>65%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective in achieving child's cooperation</td>
<td>40%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Relaxed, comfortable</td>
<td>45%</td>
<td>68% +</td>
<td></td>
</tr>
<tr>
<td>Much body language</td>
<td>50%</td>
<td>60%</td>
<td></td>
</tr>
</tbody>
</table>

* One or two observations missing

Taken from Hilde S. Schlesinger and Kathryn P. Meadow's Sound and Sign, Los Angeles, California: University of California Press, p.94
The work of Stuckless, Birch, Quigley, Frisina, Stevenson, Schlesinger, Meadow, Vernon, Koh, Howse, Fitch, and Brill all supports the utilization of sign language and fingerspelling by parents with their infant and very young deaf children. Reacting to the ancient contention that the early use of signs is harmful to the speech development of the deaf person, Stuckless and Birch (1966) found that there was no significant difference in the speech intelligibility of deaf children educated in early manual communication (sign language and fingerspelling) classes and those educated in early oral education programs. While the speech intelligibility figures offered no significant differences, significant differences in reading, speech reading (lip reading) and written language were found in the early manual communication group over the early oral group. Vernon and Koh (1971) concur in the findings which show higher educational achievement in children educated through early manual communication. Howse and Fitch (1972) looked at the effects of a sign language orientation course for parents on the expressive language of deaf children and their hearing parents. They found a significant increase in the desired expressive language after the parents' exposure to sign language. Schlesinger and Meadow (1972), looking at deaf parents of deaf children and noting their effective use of sign language with their deaf children, attribute the significant educational differences to the early parental input of language via total communication and the resulting relative ease of child-rearing. They reiterate the Howse and Fitch finding of improved parent-child
communication based on the introduction of sign language into the interaction.

Clearly, some integration of early sign language and the Altman verbal language emphases is called for. The parent education programs which are beginning in schools for the deaf and speech and hearing centers must surely recognize the relevance that these studies have for them. As they select their forms and content, they should look to the analyses of communication between hearing parents and deaf children and the pragmatic suggestions which can be derived from them.

The early 1970s brought a mandate from the United States Office of Education, Office of Child Development. Reflecting the movement back to concern with the home and child-rearing, they established Home Start programs focusing on parents as educators of children. Their application of this emphasis in relation to parents of exceptional children was clear: all programs funded through BEH's Early Education Program must establish an active parent education component. A national thrust, supportive of assumption (4) that a parent education component can and should be effectively, widely and diversely integrated into early childhood and special education efforts, was launched.

Lillie (1972), in a monograph for the First Chance Network of the Bureau of Education for the Handicapped, pointed out that there are at least 4 major areas for parent education: emotional support for parents, information exchange, parent-child interactions and parent participation in schools. In the same publication, Jelinek and Kasper list the areas they feel are important for a parent education program:
information concerning the rationale, objectives and activities of both the parent and the child programs; information about handicapping conditions in children; information about non-exceptional child development; information about behavior modification; information about how to teach language; and a follow-up program in the home. Most parent education projects haphazardly address one or several of these changes without operationalizing the goals which would be involved in effectively dealing with these areas. Problems lie not only in the content of these parent education programs, but also in the tricky problem of pairing the content and the form.

Parent education has traditionally taken three forms: (1) large group lectures; (2) small group (8-15 persons) discussions; and (3) individual parent counselling. All of these forms are appropriate for accomplishing different objectives. Large groups are most often used to convey an expert's advice to many parents who would not have the opportunity to talk with this expert on an individual basis. Small groups are often used to encourage supportive interaction between group members, to exchange information and ideas, and to discuss subjects which are subjective and perhaps controversial in nature. Individual counselling aims towards helping the parents express their concerns and finding individual solutions for these concerns. Rose (1969) looked at the varying formats and noted the strength of the small group mode for its abundance of models and role-players and its opportunities for behavior rehearsal. Morris (1973) concurs with Rose's support of the small group format, citing
feedback from parents, 75% of whom stated that group discussion was the "most advantageous" part of the parent education. Tramontana (1971) also supports the group format for parent education. Investigating problems of attendance and parent motivation for parent education, he found that peer group reinforcement (i.e. other parents' approval) was the key to parents' learning to act as effective change agents for their children. Although Rose and Morris and Tramontana support the usefulness of a small group format, it is important to look at the what and why of the specific parent education sessions being planned. Clearly, there are times (in response to specific needs and chosen content) that large groups or one-to-one counselling would be more appropriate.


Hall's work was based on course instruction for parents on theory and application of behavioral principles to home situations. Trainers did not enter the homes for follow-up. Parents were expected to independently design and apply programs for their children. Ulrich, Louisell and Wolfe describe a far-reaching early childhood and compensatory education program. Their Learning Village focuses on application of scientific principles of contingency management to community based schools. In the Learning Village parents are taught
principles of contingency planning; eventually via a comprehensive parent training program, almost 50% of the children have parents placed on the staff. Sibling and grandparent instruction is included. This comprehensive parent education program has yielded significant leaps in reading and math readiness scores, improvements unheard of in compensatory education programs. Zeilberger et al and Johnson also describe similarly effective programs for parents. Thomas et al details the use of technology for one-to-one or one-to-two parent training. A signal light acting as an on-going cue system, is used to coach parents' interaction with their children and thus to modify selected, problematic verbal behavior. Foster, a child psychoanalyst obviously working within a one-to-one mode and with a neo-Freudian stance, came to the conclusion that ameliorating some of his young clients' problems might be best facilitated by working on parent-child communication with the parents. A recent and important finding by Bud et al cast some doubt on the parent education which has not included home visitations. His research yielded the finding that laboratory training for parents must have home follow-ups because the generalization of operant procedures from the lab to the home occurred in his study only with the visitations.

Although there are still considerable questions about optimal formats for parent education, it is certain that there are varying kinds of parent education going on and that some of this parent education yields the intended learning. McIntyre (1973) places emphasis on parent education and pushes it even further. He advocates
compulsory parent training and licensing for parents contingent on the successful completion of some form of universal parenthood training.

Parents strongly influence, teach and mold their children. To pretend otherwise is naive. What McIntyre demands is that parents be taught to look more carefully at the content and direction of their teaching and then to learn techniques to accomplish this teaching more effectively.

As has been suggested throughout this review, parents trained and competent in the application of operant procedures to their home situations can bring about significant changes in their children's behaviors. There are numerous studies which support assumption (5) that effective parent education (i.e. education which will yield an increase in the selected parent and/or child behaviors) can be brought about through a focus on parent and child behaviors and parent education in behavior modification.

Work on the application of operant theory to child-rearing has been carried out by Allen and Harris (1966) and Hall and Broden (1967). Their suggestions have been utilized in seeking to demonstrate the effectiveness of parents in changing their children's behaviors (Wahler and Erikson, 1969). Additional applications of behavioral principles to home settings yield plentiful data supporting their use in decreasing children's maladaptive behaviors (Knight, Hasazi and McNeil, 1971; O'Leary and Becker, 1971). The focus on selection of specific, discrete behaviors, the management
of contingencies surrounding these behaviors and the careful recording of the effects of these procedures have brought strikingly successful results with exceptional and non-exceptional children.

Mira (1972) details the effectiveness of these operant procedures on deaf children and their parents. When several parents of deaf children described the marked negativism of their deaf children, Mira trained them to institute time-out procedures when the child demonstrated the described negativism. The parent indicated (through signs or a combination of signs and vocal language, "When you do that, you can't stay in the room with us") that this negativism was unacceptable behavior. Mira designed similar applications of operant procedures for children who refused to wear hearing aids and some who were foot stompers. In all cases, there was a decrease in the target behavior(s). Mira suggests that the special potency of behavior modification for children with communication disorders over traditional psychoanalytic treatment is based on its freedom from reliance on verbal instructions as reinforcements. The Carpenter and Augustine (1973) study on four parents with children with communication disorders yielded almost as striking results. In three out of the four homes, the parents trained in behavior change techniques related significant improvement in their child management and communication skills.

While not yet carried out with deaf children, the following studies have obvious applications for children with communication limitations: Herbert and Baer, 1972; and Kogan et al, 1972. The
Herbert and Baer study demonstrates how simple parent education can bring about desired increases in the parents' and children's behaviors. In this study, parents were given wrist counters and told to attend more frequently to selected, desired behaviors. This instruction and the counter yielded large increases in the parents' attention and the children's demonstration of the desired behavior. The Kogan et al study shows similar promise but with a far larger and more comprehensive approach. Computer diagnosis of videotaped mother-child interactions was used to prescribe remediation. The computer quantified the frequencies of specific behaviors within general classes of interaction like warmth overtures, child's solicitation of guidance, and physical demonstration of affection. The trainers then worked with parents to increase and decrease selected interaction behaviors.

Sharply slashed funding for education and published studies detailing insignificant differences in learning effected by varying educational programs have launched an era of accountability. No more grandiose promises of better quality education for all will suffice. The funding is likely to go to the programs which very specifically tell what they are going to do, how they are going to do it and perhaps most important of all, how they are going to know if, in fact, they did do it. Clearly, parent education programs like the above mentioned programs comply with these specifications. A focus on behavior change programs clearly meets the needs articulated by federal agencies and the children and parents these agencies serve.
This review of the literature strongly indicates that neither the stork nor the after birth provide guaranteed parenting talents. Some parents do it very well; some parents do not do it well at all. What can be agreed upon is that all of these parents can learn to do it better. (Gordon, 1971) In light of the described special challenges of parenting a deaf child, it is absolutely essential that the potential and actual parents of the deaf undertake and successfully complete this learning.
CHAPTER II

METHODOLOGY

Subjects. The subjects in this study were hearing parents (mothers and fathers of deaf children). They were parents of deaf children who attend day school classes for the deaf in Washington, D.C., Hartford, Connecticut, Framingham, Massachusetts and Longmeadow, Massachusetts. Subjects were naturally assembled on the basis of the schools which their children attended. The communication methodology of the school (total or oral communication) and the relation of the designated facilitator at the school to deafness (parent or educator) were keys in the choice of field test sites. Additional details on the sites is provided at the end of Chapter II.

Each of the four test sites was established with the capability of offering three different possible exposures for parents to the NRMCD program.

\[ M_1 = \text{NRMCD materials and procedures} \]
\[ M_2 = \text{pre and post testing} \]
\[ M_3 = \text{communication behavior checklisting} \]
\[ M_4 = \text{pre and post testing} \]

These three different treatments \((M_1; M_2; \text{ and } M_3)\) were set up yielding a potential of 12 test groups. The anticipated and actual participants in each of these groups at the four different sites is shown in Table A. Actual participants are those who responded through the mails or at their weekly parent group sessions.
Table A  Participants in the Field Testing: Breakdown by Site and Treatment.

<table>
<thead>
<tr>
<th>Site</th>
<th>Treatment</th>
<th>Anticipated # Participants</th>
<th>Actual # participants</th>
<th>partial pre</th>
<th>partial post*</th>
<th>completed**</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOP/Willie Ross</td>
<td>M₁OP</td>
<td>15</td>
<td>12/6</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M₂OP</td>
<td>20</td>
<td>0/0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M₃OP</td>
<td>20</td>
<td>12/11</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOE/CREC</td>
<td>M₁OE</td>
<td>15</td>
<td>15/13</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M₂OE</td>
<td>18</td>
<td>0/0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M₃OE</td>
<td>18</td>
<td>6/11</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTP/FLC</td>
<td>M₁TP</td>
<td>14</td>
<td>13/8</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M₂TP</td>
<td>24</td>
<td>0/0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M₃TP</td>
<td>24</td>
<td>7/17</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTE/Kendall</td>
<td>M₁TE</td>
<td>15</td>
<td>9/0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M₂TE</td>
<td>20</td>
<td>0/0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M₃TE</td>
<td>20</td>
<td>3/8</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Partial participants were those who provided either a pre or post-test or a pre and post-test without a social security number, thus making it impossible to use the data in the comparative quantitative analysis.

**Completed participants provided pre and post-tests and the social security identification number which enabled the data to be used in the quantitative analysis.
Anticipated participants were those who committed themselves to attending weekly sessions or those who were sent test instruments through the mails. Anticipatory figures for M₂ and M₃ were higher than for M₁ because of the expected low mail return.

The Ss in this study, hearing parents of deaf children, were non-randomized and thus, not controlled for possible extraneous variables and initial differences in groups. This lack of randomization was somewhat compensated for by an attempt to measure what could not be controlled in the study. The measurement of the nature of the groups occurred via an Interaction Descriptor and a demographic data sheet (see Appendix IIA and IIB).

The Interaction Descriptor was devised in order to quantify observations of communicative interaction between Parent and Parent and between Parent and Facilitator. The objective of the descriptor was to provide the researcher with some measure over variable non-randomized subjects, which were not directly controlled in the design of the study. These procedures are adaptations of those used in measuring oral exchanges in a structured teaching-learning situation. The most sophisticated category system developed by Flanders has served as a model for the development of the descriptor used in this research. In the Flander's Model the emphasis is on verbal communication between teacher and student, while in this model, communication was on the levels 1) between Facilitator and Parent; and 2) between Parent and Parent. The Flanders system also categorizes kinds of interactions and specifies a period of time for
recording. This Interaction Descriptor provided only a simple
description of the number and direction of group interactions that
were present in that particular group with that particular facilitator.
This recorder measured verbal behaviors within the two and a half
hour parent group sessions (treatment). This recording was done
by the researcher on the occasion of a planned site visit to each
group while session (treatment) was in progress.
Design and Procedures. The following hypotheses were formulated to test the impact of the NRMCD program to facilitate communication between hearing parents and their deaf children:

Hypothesis 1: When hearing parents of deaf children are exposed to the Northeast Regional Media Center for the Deaf's program to facilitate communication between hearing parents and their deaf children according to the NRMCD designated procedures, there will be a significant increase in their communication behaviors and the frequency of these behaviors with their deaf children.

In this study, hypotheses 2 and 3, while stating the null hypothesis, were also research hypotheses.

Hypothesis 2 ($H_0$): There will be no significant difference after exposure to the NRMCD program in communication behavior change between groups of parents facilitated by educators of the deaf or groups of parents facilitated by parents of deaf children.

Hypothesis 3 ($H_0$): There will be no significant difference after exposure to the NRMCD program in communication behavior change between groups of parents whose children are being educated in a total communication setting or groups of parents whose children are being educated in an oral communication setting.

These hypotheses direct the researcher to a research design which permits observations, deductions and conclusions on the NRMCD program's effect in varying and usual parent group settings.

The following design was chosen to test the research hypotheses: a quasi-experimental $3 \times 3 \times 2$ factorial design. It operated to test
the hypotheses by examining behavior change over a six week exposure to materials and procedures designed to bring about this communication behavior change. (See Figure 2.)

The decision to test the NRMCD program in its operating situation, in field sites which as closely as possible approximated its eventual utilization conditions, led to the choice of a quasi-experimental design. Whereas "the goal of the experimenter is to use designs that provide full experimental control through the use of randomization procedures," NRMCD field test efforts went towards providing as much control as possible under existing, real conditions. And because this field test sacrificed the purity of the experimental for the reality of the quasi-experimental, "it becomes imperative that the researcher be thoroughly aware of which specific variables his (her) design fails to control." These concerns were apparent:

1) lack of total control over the scheduling of experimental stimuli; and 2) lack of randomization in subject selection. A further discussion of the uncontrolled factors in this design is provided in the Questions of Validity portion of this chapter.

Stephen Isaac in Handbook in Research and Evaluation (1972) describes the major benefits of the factorial design:

To permit research studies where more than one factor is free to vary at a time, factorial designs have become increasingly prominent. They have several advantages over the classical experimental design:

1. They permit the testing of several hypotheses simultaneously, rather than having to conduct a series of single X experiments to study the effects of different Xs on, for example, learning.
2. They permit the conduct of only one experiment
to answer several complex questions at once.

3. Where interaction between 2 or more variables simultaneously makes a difference, it reveals this difference.

4. Where the classical experimental control of all variables but one is impractical or impossible.

These benefits directly apply to the NRMCD choice of a factorial design. "A factorial design is one in which two or more variables are manipulated simultaneously in order to study the independent effect of each variable on the dependent variable as well as the effects due to interactions among the several (independent) variables."

In this study, there are three independent variables: facilitator type (parent or educator), communication methodology (total or oral) and exposure method (M_1, M_2, M_3). The dependent variable is behavior change as measured by 2 instruments (a pre and post-test and a communication behavior checklist).

\[ X = \text{independent variables} \]

assigned \( X = \) educator of the deaf or parent of the deaf: the facilitator assigned \( X = \) total or oral communication methodology in use in the program of the deaf child

active \( X = \) NRMCD program to facilitate parent-child communication

\[ Y = \text{dependent variables} \]

\( Y_a = \) pretest

\( Y_b = \) post-test

\( Y_c = \) communication behavior checklists

Figure 2 provides a graphic representation of the design.
Figure 2

THE 3X2X2 FACTORIAL DESIGN

<table>
<thead>
<tr>
<th>Oral (O)</th>
<th>Total (T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educator (E)</td>
<td>Method (M₁)</td>
</tr>
<tr>
<td>M₁ OE</td>
<td>M₁ TE</td>
</tr>
<tr>
<td>M₁ OP</td>
<td>M₁ TP</td>
</tr>
<tr>
<td>Method (M₁)</td>
<td>Method (M₁)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oral (O)</th>
<th>Total (T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educator (E)</td>
<td>Method (M₂)</td>
</tr>
<tr>
<td>M₂ OE</td>
<td>M₂ TE</td>
</tr>
<tr>
<td>M₂ OP</td>
<td>M₂ TP</td>
</tr>
<tr>
<td>Method (M₂)</td>
<td>Method (M₂)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oral (O)</th>
<th>Total (T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educator (E)</td>
<td>Method (M₃)</td>
</tr>
<tr>
<td>M₃ OE</td>
<td>M₃ TE</td>
</tr>
<tr>
<td>M₃ OP</td>
<td>M₃ TP</td>
</tr>
<tr>
<td>Method (M₃)</td>
<td>Method (M₃)</td>
</tr>
</tbody>
</table>
The Symbols for Figure 2:

Method \((M_1) = \text{NRMCD materials & procedures pretest / post-test communication behavior checklist}\)

Method \((M_2) = \text{No exposure to NRMCD materials & procedures communication behavior checklist pretest / post-test}\)

Method \((M_3) = \text{No exposure to NRMCD materials & procedures No communication behavior checklist pretest / post-test}\)

Parent (P) = The facilitator is a parent of a deaf child

Educator (E) = The facilitator is an educator of the deaf

Oral (O) = The communication methodology of the school or program is oral

Total (T) = The communication methodology of the school or program is total

The Factorial Design \(3 \times 2 \times 2 \times 2\) yields 12 different groups. Each of these groups is listed below and depicted by a separate cell in one of the 3 boxes on the preceding page.

Group 1: \(M_1OE\)  
Group 2: \(M_1TE\)  
Group 3: \(M_1OP\)  
Group 4: \(M_1TP\)  
Group 5: \(M_2OE\)  
Group 6: \(M_2TE\)  
Group 7: \(M_2OP\)  
Group 8: \(M_2TP\)  
Group 9: \(M_3OE\)  
Group 10: \(M_3TE\)  
Group 11: \(M_3OP\)  
Group 12: \(M_3TP\)
**Instrumentation.** Instruments of measurement in the study were a pretest and post-test as well as a weekly behavior recording checklist which indicated the amount and frequency of behavior change as recorded by each S.

The instruments \( Y_a, Y_b, Y_c \) have been derived from the suggested Parent Behaviors, section IV, of each of the visuals listed in the facilitator's manual (see Appendix IB). Each part IV was examined for the listed behaviors which directly involved parent-child communication. These behaviors were then compiled in a long and tentative field test instrument. This instrument (see Appendix IIC), after review by professionals and parents of the deaf, eventually became the pre and post-test and communication behavior checklist.

The problem with this instrument was that it combined questions about daily interactions with questions about weekly interactions with questions about once-in-a-lifetime interactions. It also failed to give any indication about criterion levels for always, usually, sometimes, etc. The information that it could yield would be useful in the testing of the hypotheses. Thus a division into yes and no questions and always, usually, sometimes, etc. questions was undertaken. The criterion level was still missing; the length of the instrument might deter parents from completing the instrument and the questions lacked essential specificity. There were far too many potentially ambiguous questions.

A new pre/post-test (see Appendix IID) was born. It separated
out long and short term questions, but still failed to provide a criterion level for yes and no responses. It also lacked the examples which would increase its specificity. Its final and major flaw was the problems that the researchers would have in utilizing the data it yielded. What exactly did a switch from yes to N.A. indicate? What about a switch from no to yes? These problems contributed to the construction of the last, revised and still imperfect, pre and post-test. A "Directions For the Administration of the Pretest" was included to assure likeness in administering the pretest (see Appendix IIE).

The Communication Behavior Checklist has also been through numerous revisions (Appendix IIF). It took the remaining items from the initial field test instrument and asked parents to self-select those communication behaviors which they wished to record. Once parents had selected up to four communication behaviors with their deaf children, they were asked to observe and record the frequency of those types of interactions on a daily basis for a six week period. The major revisions in this instrument aimed to increase specificity through examples and to make the directions to parents more explicit. The Communication Behavior Checklist, Appendix IIG, while providing a specific week by week counting of the frequency of selected behaviors, also relied on the highly questionable resource of self-reporting (Herbert and Baer, 1972).
**Analyses of Data.** The data yielded by the pre and post-tests was analyzed through an analysis of variance. Statistically, the main effects of the study were of primary concern because they shed direct light on H₁. While interactions testing H₂ and H₃ occurred, the reliability of these interactions was statistically questionable due to the diversity of baselines likely to be derived from the individual groups. However, generalization from the first order interactions and thus, H₂ and H₃ were reported.

D scores (differences between the means of the pretest and post-test scores) were compared for all twelve groups to ascertain the effect of X and thus to test H₁, H₂ and H₃. The researcher was aware that non-random selection of subjects might result in an interaction effect between selection and certain extraneous variables (education level, cultural differences); this could have yielded data erroneously attributed to the effect of X.

The small number of subjects in the experiment jeopardized the finding of a statistically significant result. This problem might have been resolved by increasing the power (n) of the experiment to avoid a Type II (B) error. This alternative was determined to be too cumbersome to manage for the slight change in sensitivity to be realized. Thus hypotheses were tested at the .05 level of significance.

H₂ and H₃ are stated as non-directional hypotheses and therefore, a two-tailed test was applied to determine the direction that the expected differences or relationships would take.

The Communication Behavior Checklist yielded data which was
looked at through group and individual percentages of increase or decrease. Comparisons between groups in increase and decrease of behavior change were made.

While the analyses of data for the pre and post-test yielded no statistically significant differences, generalizations and trends were still pinpointed. Both dependent variables yielded information from which trends could be inferred; the Interaction Descriptor revealed information about parent-parent and parent-facilitator interactions; and the Open Forum Questions (see Appendix IIH) provided information on parents' perceptions of their problems with their deaf children and their impressions of the NRMCD program.
Questions of Internal Validity. Campbell and Stanley, 1963, identify eight extraneous threats to internal validity, i.e. threats to the ideal of a controlled experiment. It is important to look at this formative evaluation in light of these threats and thus, to acknowledge some strengths and weaknesses within the formative evaluation.

(1) History: The field test was designed to enable only six weeks to elapse between pre and post-test. This cut down on the likelihood of events occurring within the course of the program likely to cause changes in behavior attributed to the program.

(2) Maturation: A six week period did not cause sufficient parent or child maturation to warrant concern over this particular threat.

(3) Pre Testing: Pretesting was not a major concern and limitation of the study. The impact of pretesting on the parents was measured by running groups (in each of the settings) which received this instrumentation without the NRMCD materials and procedures.

(4) Instrumentation: The instruments have undergone parent and professional scrutiny. They have been reworked and revised so that they reflect the stated objectives in the facilitator's manual. Facilitators provided parents with training for parent checklisting of their communication behaviors with their deaf children. Certainly, self-recording of this nature jeopardized the objectivity of this important measurer. The excessive length of the pre and post-test
also caused test fatigue; the demands of daily checklisting may also have had the same effect.

(5) Statistical Regression: The researcher did not choose groups based on any pre-conditions like high or low scores. This threat did not affect this field test.

(6) Differential Selection of Subjects: This study did assume likeness of experimental groups. Since we are using non-random groups, the researcher sought to identify and define the nature of these groups in order to introduce some of the control that non-randomness took away.

(7) Experimental Mortality: The researcher was very concerned that parents might not complete the six week sessions. Consistent parent participation or the lack of it is an acknowledged problem in schools for the deaf. The failure of parents to complete the six weeks was, in itself, important information. An effort was made to start with more than 15 subjects so that the power of the study would not be completely decimated by drop-outs. Even that effort did not assure a significantly large number.

(8) Selection-Maturation Interaction: The factorial design acknowledged the possibility of an interaction between the NRMCD program and the nature of different groups. This interaction was described.
Questions of External Validity. Campbell and Stanley, 1963, also clarify threats to the external validity or the generalizability of a study.

(1) The Interaction of Testing and X: There was concern that NRMCD pretesting might increase the subject's receptivity to a program to facilitate communication between hearing parents and their deaf children. Since the program was very much an awareness-raising effort, it would be difficult to separate out the effects of testing from X (treatment). This then would be a threat to the generalizability of these results.

(2) The Interaction of Selection and X: The subjects in this study were volunteers in a parent education program - not volunteers in a study. They were not special parents in any way; it is most likely that they were like other parents who might enter a school for parent education of this type.

(3) Reactive Arrangements: The program was used in "usual" settings with "usual" parents and facilitated by "usual" facilitators. Results should be generalizable to other "usual" and equally non-experimental settings.

(4) Multiple Treatment Interference: The subjects in this study were not subjects in any other testing at the same time.
The Sites.

Site MOP: Method Oral (communication) Parent (facilitated)

The Willie Ross School
Longmeadow, Massachusetts

During the developmental phases of the NRMCD program, the social worker and the audiologist at the Willie Ross School provided important feedback and access to parents. Through this contact early in 1972, they had expressed tentative interest in serving as a field test site. At that time they were asked to consider if they had a parent who might be interested in and capable of facilitating a group of parents of deaf children.

They unanimously suggested Ms. K, a parent of a six year old daughter with the dubious distinction of having the "deafest audiogram in the school for the deaf." As a staunch oralist and wife of the President of Willie Ross' Parents' Association, she had interest and communication lines already established.

Her concern and the concern of the headmaster and teachers was that she would not be able to gather the fifteen parents strongly suggested as a minimum number for implementation of testing of the program. The Willie Ross School did not share the good fortune of the MOE program. After the initial interest in funding and forming a small, day oral program, in the past two years there has been less and less parent involvement.

Site MOE: Method Oral (communication) Educator (facilitated)

Capitol Region Education Council
Hartford, Connecticut

The Capitol Region Education Council (CREC) administers programs for exceptional children throughout the Hartford area. Deafness is only one of the exceptionalities which the CREC program serves. It serves deaf children and their parents by setting up and administering special, oral day classes for the deaf in public elementary schools scattered around Hartford.

The CREC parents of the deaf are the most active, involved group of parents encountered in the research, design and evaluation of the NRMCD program. They draw 90% of the parents to scheduled parent association meetings, an attendance figure unheard of in other schools for the deaf. Legislative battle experience and close proximity of a total communication school for the deaf might possibly be credited with their unusual and positive involvement. Certainly, they sense the trend towards total communication and wish to join ranks to lobby for and preserve a program in which they believe. Also, because of their children's closer integration with hearing children through location of their classes in local public schools, the parents may make more frequent comparison in cognitive development with these hearing children. The poignant and persuasive results of these comparisons might have created sharper needs than in the three less integrated field test sites.

A representative from the CREC administration and the CREC Parent Association visited NRMCD during the summer of 1973 and expressed a firm interest in becoming one of the four test sites. Their only concern was in the selection of a facilitator. When asked
to choose an educator, they asked to be given some time to make a decision. Two or three weeks after this initial meeting, and after a second meeting, and after an additional meeting with three teachers, and discouragement of using the materials to bolster one particular teacher's sagging relationships with parents, selection of Ms. F was accomplished. Enthusiastically, parent address lists and visuals and manuals were exchanged. The CREC people were concerned that they would have too many volunteer parents (any number over 20 was suggested as too many, considering the guaranteed drop-out rate). In fact, for session 1, they had 21 parents — and others who wished to attend on another evening.

Site MTP: Method Total (communication) Parent (facilitated)

The Learning Center for Deaf Children

Framingham, Massachusetts

The Learning Center for Deaf Children is a place with innovative methodology and missionary zeal. The school uses total communication in a state where oral communication was once the only recognized and funded methodology for educating young, deaf children. The school has also begun experimentation in integrated day, open education for its students. In an exceptionality known for its attempts to limit visual and aural noise and competing stimuli in any form, an integrated total communication program is unusual and provocative.

The parents who are active at the school are very, very active. They are a small core group and they show considerable concern over the uninvolved parents, especially the parents who do not come to
the school for weekly sign language classes. In a total communication school, parents are strongly encouraged to join with the school in utilizing the combination of speech and signs for communicating with the child.

Parents and staff of the Learning Center were involved in the research and design of the NRMCD program. The Learning Center sent representatives to the three parent input and review sessions which were central to the program's developmental stages. This initial and long-term commitment to the open-ended parent education program assured their interest in serving as a field test site. After MTE, MOP, and MOE were established, contact was made with the Learning Center. They were very willing to ask Mr. K, the President of their Parent's Association and a parent who had not been involved in the creation of the NRMCD program to serve as facilitator. Knowing their problems with parent participation and yet, enthusiastic about the goals of the program, Mr. K agreed to work as the facilitator of the MTP site.

Site MTE: Method Total (communication) Educator (facilitator)

Kendall Demonstration School
Gallaudet College
Washington, D.C.

Located in inner city Washington, D.C., serving the young, deaf children and parents of that area, and situated on the Gallaudet College campus, the Kendall Demonstration School fulfilled several of the NRMCD test site needs. Unlike the other sites, it is an
inner city school with a predominantly Afro-American population. It educates through a total communication methodology. And finally, Kendall School made the initial contact with NRMCD to express its interest in the program and to ask to be included as a field test site.

Extensive telephone and mail communication reinforced their interest in serving as a field test site. Ms. B, social worker of the Kendall Demonstration School and the person who originally contacted NRMCD, agreed to act as facilitator for a group of 15 or more parents of deaf children. Again, to this facilitator as to the other facilitators, no agreement to utilize their school or group as a field test site was made until they could assure fifteen or more starting parents. Ms. B offered that assurance as did the other three facilitators.

Table A displays the number of anticipated and actual participants from the four field test sites. In this table, actual participants are considered to be those who were involved with the formative evaluation by meeting in weekly groups or by responding to the instructions through the mails.
In Summary. This methodology chapter describes an exploratory field test study. It seeks to yield formative evaluation data to be used to revise a mediated program to facilitate communication between hearing parents and their deaf children. The findings about parent communication behavior change when exposed to the NRMCD program in defined settings will be generalizable to settings which are similarly defined. The researcher should be able to generalize the findings of the NRMCD program to day school settings using oral or total communication methodology and to groups which are educator or parent facilitated. Most programs for deaf children would fall into these categories.
CHAPTER III
Results

Chapter I includes a listing of the ten purposes of this study. In general, these purposes deal with inquiry into the nature of communication between hearing parents and their deaf children, evaluation of the impact of the NRMCD program on parent-child communication and changes in the program based on this inquiry and evaluation.

The results of this study will be reported by stating each of these purposes and then presenting data and inferences from this data in response to the specific purposes. Where findings address more than one purpose, the data will be presented beneath the several purposes to which it applies. This Chapter, Chapter III, will present results based on the first eight purposes. The last two purposes will be central to Chapter IV.

Fred Kerlinger, in Foundations of Behavioral Research stated, "Even when hypotheses are not confirmed, they have power. Even when y does not covary with x, knowledge is advanced. Negative findings are sometimes as important as positive ones, since they cut down the total universe of ignorance and sometimes point up fruitful further hypotheses and lines of investigation." [p. 28]
To look at the impact of the NRMCD program in light of the Parent-Child Communication Task Force's operationalization of "to facilitate communication between hearing parents and their deaf children" as expressed in Part IV of the facilitator's manual, Parent Behaviors.

The operationalization of effective parent-child communication provided suggestions for many of the behaviors which would be present in a home with effective parent-child communication. These suggestions were then built into the Part IV, Parent Behaviors, section of the facilitator's manual. This Section IV then provided the basis for the pre and post-test instrument which served as a dependent variable in this formative evaluation.* It was this dependent variable, the pre and post-test, which provided the scores reported in this section. Parent and facilitator response to this instrument and the inconclusive results it yielded necessitates an emphasis on the fact that this instrument - as well as the NRMCD program - are in formative stages. Specific suggestions for alterations will be included in Chapter IV of this evaluative study.

In order to respond to this purpose of the study, it is essential to look at the pre and post-test grand means and to examine the main effects from week one to week six for \( M_1 \) (NRMCD program, pre and post-test and Communication Behaviors Checklist) and \( M_3 \) (pre and post-test through the mails) groups. Analyses by

*A description of the development process for this instrument is included in Chapter II. Samples of the instrument at various stages in its development are included in Appendix II.*
Figure 3: Grand means for the entire population means for main effects: $M_1$ vs $M_3$ Groups ($n=44$)

- $M_3$ Group
- Entire Population
- $M_1$ Group

Mean Scores
assigned independent variables of oral and total and parent and educator are included in the responses to purposes (2) and (3).

Figure 3 presents a clear picture of gain from pre to post-testing. This gain held for the entire population, the M₁ group and the M₃ group.

At this point it is important to mention problems of missing data. Where it would be appropriate to include M₂ (pre/post-test and checklist instruments through the mails) scores in Figure 3, this is impossible. A total of 82 M₂ parents were sent instructions and instruments through the mails. Unfortunately, the effort involved in weekly checklisting without the reinforcement of facilitator and peer approval created a situation whereby no pre/post-tests or checklists were returned. Thus, M₂ data is not included.

A similar problem of missing data occurred in the M₁TE (Washington, D.C.) site. Administrator and parent turmoil at the Kendall School resulted in problems of attendance at the sessions. While some pretests were provided, and a few M₃ pre and post-tests were returned, there is no post-test data for the M₁TE group.

What must be noted from Figure 3 and what is seen in the figures and charts which follow is that there was no significant difference in gain in M₁ over M₃ groups. The general rise in scores from pre and post-testing indicated that the test, in itself, may have been a treatment and/or that the instrument did not effectively measure what it was designed to measure. A third possibility, and one which was
contradicted by the strongly positive feedback from parents and facilitators included in a later portion of this Chapter, was that the program did not significantly affect parent-child communication.
(2) To measure parent-child communication behaviors in varied and usual settings, and

(3) To gain information in order to make some predictions about the effects of utilizing the NRMCD program in parent groups and in parent groups of a particular nature (total or oral methodology and educator or parent facilitated).

The parent and educator facilitation within oral and total sites was the "varied and usual settings" about which purpose (2) inquires. Since the vast majority of programs for the deaf would be either oral or total, and the parent training would be either parent or educator facilitated, the NRMCD program will be used in differing combinations of the above described independent variables. The following Figures 4 and 5 and Tables B, C and D reflect the interaction of these variables in light of each other and the additional $M_1$ and $M_3$ factors.* While there are considerable questions about the efficacy of the pre/post-test instrument and the likely Type II (B) error resulting from the low n for the evaluation, the NRMCD program and the concomitant interactions are described in the following pages.

*Summary Tables for the analyses of variance of gain scores are presented in Appendices III A, B and C.
Figure 4 presents the relationship of oral and total and parent and educator and M₄ and M₃ groups. Tables B, C and D provide the means and standard deviations of gain scores for these analyses. Special care in the examination of the total educator cell gain score should be exercised; only one subject, an M₃ parent who made a leap of 44 points from pre to post-testing, was included. By examining the data through an analysis of variance and utilizing an Alpha level of .05, it was found that there were no significant differences for the main effect impact for oral vs. total, parent facilitated vs. educator facilitated, or M₁ vs. M₃. To arrive at these and the following results, gain scores and main effects were examined. An analysis of variance was run on post test scores covaried by pre-test scores. This type of analysis was done to control for the differing starting levels of the scores on the pre-test.

Although the main effects of oral vs. total and parent vs. educator were insignificant, the covariance analysis found the interaction of the oral/total factor and the parent/educator factor as significant (F= 4.935; df=1; p ≤ .032.)

The two-way analysis of variance of the gain scores for the oral/total and parent/educator factors (when M₁ and M₃ variables were not taken into account) were also insignificant. Again, however, the interaction of the oral/total and parent/educator factors was significant at p ≤ .030, F=5.086; df= 1. When the numbers involved in the analyses, especially the analyses which involve the total educator cell, are considered, the reliability of these results should be viewed with skepticism. While these results indicate that there is not a significantly different impact on parent groups based on
oral or total or parent or educator factors, as was discussed and as will be seen in the following discussion, there was also not a significant difference in M₁ vs. M₃ groups.

Table B presents the mean gain scores for the M₁ and M₃ and oral and total groups. The covariance analysis of the post-test covaried by the pretests of M₁ and M₃ and the oral and total communication variables yielded no significant differences in the impact of the program. When gain scores were further analyzed, based on possible interactions of oral/total vs. M₁ and M₃, there were still no significant differences. Interestingly, and in concurrence with results presented in Figure 5 and with the results of the Communication Behaviors Checklist, oral and total factors made a small though not a statistically significant impact.

Table D presents the mean gain scores for the M₁ and M₃ and parent and educator groups. When post-test scores covaried by pretests and gain scores were analyzed, no significant differences in effects or gains were yielded.

Mean gain scores, scores which show comparisons or gain in uncrossed groups, are presented in Figure 5. This Figure offers a picture of the insignificant differences yielded by the variables. M₁ and M₃ gains are almost identical; ironically, the untreated M₃ group has a slightly greater gain figure than the group with the weekly exposure to the NRMCD program.

Oral and total gain scores show more variance, although
not enough variance in light of their varying numbers, to produce significant differences. A trend which appears in Figure 5 and which emerges in the Communication Behaviors Checklist also is for the oral groups to register lower scores at the commencement of the program; these scores, then, due to the nature of the parents in the oral group, the facilitators of those groups, or a regression to the mean, make a greater gain than the total groups. The parent and educator groups do not show the same gap in gain scores. Again, the impact of the program on parent and educator facilitated parents did not significantly differ.

The results presented under Purpose (1), (2) and (3) should be examined in light of the following concerns: the low n for the different cells; the varying n for the different cells; the varying baseline scores for the different cells; and the questionable pre and post-test instrument. With these concerns in mind, it is useful to recall the tentative findings of the lack of significant impact of NRMCD program in one type of group over another, the lack of significant impact of the NRMCD program on M₁ vs. M₃ parents and the significant interaction between parent/educator and oral/total settings.

These four major concerns about the results are elaborated in Chapter IV. That Chapter also includes suggestions for a design and instrument less likely to yield these questionable results.
Means for Main Effects for Oral vs. Total Groups and Parent vs. Educator Groups (n=44)
Figure 15

Mean Gain Scores: M1, M3, Oral, Total, Parent, Educator (n = 44)
### Table B
Mean Gain Scores and Standard Deviations for the Interaction of $M_1/M_3$ and Oral/Total (mean/Sd)

<table>
<thead>
<tr>
<th></th>
<th>$M_1$</th>
<th>$M_3$</th>
<th>Grand Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>10.85/25.04</td>
<td>14.44/15.03</td>
<td>12.64</td>
</tr>
<tr>
<td>Total</td>
<td>4.50/22.26</td>
<td>3.66/26.16</td>
<td>4.08</td>
</tr>
<tr>
<td>Grand Mean</td>
<td>7.67</td>
<td>9.05</td>
<td>8.36</td>
</tr>
</tbody>
</table>

### Table C
Mean Gain Scores and Standard Deviation for the Interaction of Oral/Total and Parent/Educator

<table>
<thead>
<tr>
<th></th>
<th>Oral/Total</th>
<th>Grand Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>18.07/19.87</td>
<td>9.57</td>
</tr>
<tr>
<td>Educator</td>
<td>7.23/23.49</td>
<td>25.61*</td>
</tr>
<tr>
<td>Grand Mean</td>
<td>12.65</td>
<td>22.53*</td>
</tr>
</tbody>
</table>

*n=1 for this cell: This should effect interpretation here.*

### Table D
Mean Gain Scores and Standard Deviations for the Interaction of $M_1/M_3$ and Parent/Educator

<table>
<thead>
<tr>
<th></th>
<th>$M_1$</th>
<th>$M_3$</th>
<th>Grand Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>10.68/22.26</td>
<td>7.80/21.9</td>
<td>9.24</td>
</tr>
<tr>
<td>Educator</td>
<td>7.15/26.97</td>
<td>14.80/17.08</td>
<td>10.97</td>
</tr>
<tr>
<td>Grand Mean</td>
<td>8.91</td>
<td>11.3</td>
<td>10.10</td>
</tr>
</tbody>
</table>
(4) to measure the impact of the NRMCD program in light of its ability to bring about an increase in frequency of parent-selected communication behaviors with their deaf children.

Parents in the $M_1$ groups and in $1/2$ the homes contacted through the mails ($M_2$ groups) were asked to select from one to four questions dealing with differing communication behaviors. After the selection of these questions for the Communication Behaviors Checklist, they were asked to self-record the number of times each day that they performed the behavior asked about in the question. (See Appendix IIG for the Communication Behavior Checklist form and questions.) Parents were provided by facilitators or through the mails with instructions on how to accomplish the self-recording and with forms for this self-measurement.

Many parents in $M_1$ groups who completed the NRMCD program also completed the 5 weeks of self-recording. $M_2$ parents, a total of 82 parents contacted and instructed through the mails, did not return or complete the 5 weeks of self-recording. Whereas facilitator and parent-peer reinforcement encouraged $M_1$ parents through the rigors of behavior counting, $M_2$ parents received none of that reinforcement through the mails. Therefore, while 2 or 3 of the 82 $M_2$ parents sent in the first 2 weeks of checklisting, none of the 82 parents completed the Communication Behaviors Checklist instrument. Results reported in this chapter and discussed in Chapter IV reflect that missing data and the missing $M_1$TE Washington, D.C., data.
The Communication Behaviors Checklist instrument provided data which enabled the evaluator to look at the impact of the NRMCD program over time, i.e. at the end of each week and at the end of the six week exposure. It also provided data for looking at the three groups (M1OP, M1OE, and M1TP) in light of their group change in average behaviors per selected question. Most importantly, this instrument offered information on individual parents and their self-perceptions of selected communication behaviors with their deaf children during the course of the NRMCD program. Figures 6, 7 and 8 present the group averages of behaviors per question. Figures 9 through 30 represent individual parents' total weekly scores on the questions which they had selected.

Before concentrating on changes in individual's totals, it is useful to examine the group averages. Figures 6, 7 and 8 are graphs which present these averages. Numbers were arrived at by taking individual parent's total behavior per week and dividing by the number of questions selected by that parent. The results of these computations were then averaged by group. This process yielded weekly group means for behaviors per selected question.

Group M1OP showed the most steady increase in average frequency/question. Figure 6 presents this finding. This graph shows a reiteration of an individual parent trend toward diminishing frequency of behavior during the third or fourth week of checklisting. Group M1OP also shows that parents reporting generally lower frequencies of communication behavior at the onset of the program made the
greatest gains during and after exposure to the program.

Average frequencies for group M₁OE are reported in Figure 7. Although a faint upward trend can be seen, the week 4 decrease in frequency is the most striking of results presented in this Figure. Noticeable gains over weeks 1, 2 and 3 were made. Interestingly, several parents in M₁OP and M₁OE stated in the Open Forum questions that they felt the behavior checklisting was a strong positive part of the program and/or they intended to continue doing the behavior checklisting. The somewhat positive results of these first two group averages may reflect this enthusiasm for the instrument.

M₁TP parents' averages show little notable changes over time. While the group does not have a week 4 decrease, it does have one at the end of week 3. The five averages represented in Figure 8 show a range of slightly less than 4. The difference between the week 1 average and the week 5 average is 1.4, a small decrease in average frequency per question. At the onset of the program, the averages of the M₁TP and the M₁OE groups, the groups which failed to show marked increases, were considerably higher than the M₁OP week 1 average of 11.7 behaviors per question.

Because these averages are computed from the recording of individual parents, many of the graphs presented in Figures 9 through 30 reiterate group average trends.

If individual parents self-recorded and turned in 4 or 5 of the possible 5 weeks of checklisting, their total checklisted communication behaviors per week are graphed in Figures 9 through 30.
Because checklisting was an arduous instrument, many of the individuals who commenced checklisting did not complete the 4 out of 5 recording forms. While 33 parents turned in week 1 recording forms from the M10P, M10E and M1TP groups, only 22 of these 33 actually provided sufficient (4 or 5 weeks of forms) data for graphing. It is from these 66% of the initially involved parents that the trends for individual results from the Communication Behaviors Checklist were derived.

Most of the parents who continuously and consistently participated in the behavior checklisting via the NRMCD program showed increases in frequencies of communication behaviors with their deaf children. Better than 63% of the responding parents self-reported a higher frequency of selected communication behaviors at the end of the six week NRMCD program than they did at the beginning. The remaining 37% reported sharp (a drop of 20 or more) decreases in only three of the twenty-two cases (Figures 27, 29, and 30). Within the 63% who report an increase from week 1 to week 5, 7 of the 14 or 50% were sharp (increase of 20 or more) gains (See Figures 10, 11, 13, 15, 19, 20 and 23). Only three of the parents reported virtually unchanged frequency scores over the course of the 6 weeks. These 16% of the parents (See Figures 14, 16 and 21) reported frequencies which fluctuated only slightly (5 or less) from earlier or later scores.

The following table represents a group by group breakdown of participation and scores for the Communication Behaviors Checklist.
The recorded \( n \) is those parents who turned in 4 or 5 recording forms. The \%\ increasing and decreasing is found by a comparison of week 1 frequencies with week 5 frequencies.

Table E    Results of the Communication Behaviors Checklist  
By Groups - Frequency Change Over Time

<table>
<thead>
<tr>
<th>Group</th>
<th>week 1 n</th>
<th>recorded n</th>
<th>% decreasing</th>
<th>% increasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>M_{1}OP</td>
<td>9</td>
<td>7</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>M_{1}OE</td>
<td>14</td>
<td>9</td>
<td>22%</td>
<td>88%</td>
</tr>
<tr>
<td>M_{1}TP</td>
<td>10</td>
<td>6</td>
<td>67%</td>
<td>33%</td>
</tr>
</tbody>
</table>

The above table clearly indicates where the strong gains in self-recorded parent communication behaviors were located. \( M_{1}OP \) and \( M_{1}OE \) parents showed those gains, with \( M_{1}OP \) parents increasing in 100\% of the cases. \( M_{1}TP \) parents did not demonstrate these same gains. Their scores diminished over time in 67\% of the recorded cases. After exposure to the NRMCD program, 63\% self-reported gains; the preponderance of these parents were in the \( M_{1}OP \) and \( M_{1}OE \) sites.
AVERAGE FREQUENCY OF PARENT BEHAVIOR PER QUESTION GROUP
Figure

AVERAGE FREQUENCY OF PARENT BEHAVIOR PER QUESTION GROUP
AVERAGE FREQUENCY OF PARENT BEHAVIOR PER QUESTION

Figure
TOTAL FREQUENCY OF INDIVIDUAL PARENT'S SELECTED COMMUNICATION BEHAVIORS / WEEK

GROUP

Figure 1

Parent

Figure 2

Parent

Figure 3

Parent

Figure 4

Parent

Figure 5

Parent

Figure 6

Parent
TOTAL FREQUENCY OF INDIVIDUAL PARENT'S SELECTED COMMUNICATION BEHAVIORS / WEEK GROUP

Figure 19  Parent

Figure 19  Parent

Figure 15  Parent

---

Figure 19 shows the total frequency of communication behaviors over weeks for a particular group of parents. The graph displays an upward trend in communication behaviors from week 1 to week 5.

Figure 19 illustrates the total frequency of communication behaviors for another group of parents. The graph shows a different trend, with a decrease in communication behaviors from week 1 to week 5.

Figure 15 presents a different set of data, possibly indicating another pattern of communication behaviors over weeks for yet another group of parents.
TOTAL FREQUENCY OF INDIVIDUAL PARENT'S SELECTED COMMUNICATION BEHAVIORS/WEEK

GROUP MIOE

Figure 16  Parent 0424  Figure 17  Parent 0474

Figure 18  Parent 06732  Figure 19  Parent 07510
TOTAL FREQUENCY OF INDIVIDUAL PARENT'S
SELECTED COMMUNICATION BEHAVIORS / WEEK

Figure 20

Parent

Figure 21

Parent

Figure 22

Parent 04126

Figure 23

Parent
TOTAL FREQUENCY OF INDIVIDUAL PARENT’S SELECTED COMMUNICATION BEHAVIORS/WEEK

GROUP

Figure 29

Parent

Week

Total of Communication Behaviors
TOTAL FREQUENCY OF INDIVIDUAL PARENT'S SELECTED COMMUNICATION BEHAVIORS / WEEK

GROUP

Figure 25

<table>
<thead>
<tr>
<th>Parent</th>
<th>Figure 26</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parent</td>
</tr>
</tbody>
</table>

Figure 27

Parent 0.3505

Figure 28

Parent 0.6542
TOTAL FREQUENCY OF INDIVIDUAL PARENT'S
SELECTED COMMUNICATION BEHAVIOR / WEEK
GROUP

Figure 29

Parent

Figure 30

Parent
Following the preceding consideration of purposes (1), (2), (3) and (4), it is appropriate to address the hypotheses which were set up for this formative evaluation. The data presented in relation to the first four purposes provide information for consideration of the acceptance or rejection of these three hypotheses.

All three hypotheses deal with measurement of the impact of the NRMCD program on parents' communication behaviors with their deaf children. The first hypothesis suggests the direction of the impact of the NRMCD on all parents exposed to it.

Hypothesis 1: When hearing parents of deaf children are exposed to the Northeast Regional Media Center for the Deaf's program to facilitate communication between hearing parents and their deaf children according to the NRMCD designated procedures, there will be a significant increase in their communication behaviors and the frequency of these behaviors with their deaf children.

This hypothesis calls for an examination of $M_1$ vs. $M_3$ scores. As was stated under purpose (1), at an Alpha level of .05 no significant differences in $M_1$ vs. $M_3$ scores were found. After establishing a group at each of the sites who were exposed to the six week NRMCD parent education program ($M_1$) and a group which participated in the pre and post-testing ($M_3$), and analyzing their main effect and gain scores through an analysis of variance, no significant differences in $M_1$ over $M_3$ were yielded. The lack of significant differences in $M_1$ over $M_3$ groups leads to a rejection of hypothesis 1.

However, if the results of the Communication Behaviors Checklist are considered in relation to this hypothesis, then it is not as easily rejected. As was stated under purpose (4), more than 63%
of the parents who completed the checklisting operations made increases in behaviors from the beginning to the end of the program. One-half of the parents who reported this increase reported that it was a sharp increase, a gain in frequency of 20 or more times/week. Two out of the three \( M_1 \) groups (\( M_{10P} \) and \( M_{10E} \)) made considerable gains in frequency of self-reported communication behaviors and one of those groups (\( M_{10P} \)) showed gains in 100% of the checklisting subjects. Although no control groups were in operation for this instrument, results from the Communication Behavior Checklist instrument still negate wholesale rejection of the first hypothesis.

Acceptance or rejection of this hypothesis would be based on the credibility that the investigator placed on the particular instrument. Because each instrument has its strengths and weaknesses, selection of one and rejection of the other is impossible. Rather it is beneficial to recognize the conflicting pictures cast by the two instruments and to recognize the inability to firmly accept or reject hypothesis 1. Instead, through these discussions, an attempt was made to describe program impact based on the numerical data provided by these two differing instruments.*

Hypotheses 2 and 3, while presenting the null hypothesis, also provided the research hypotheses. This formative evaluation sought to determine the impact of the NRMCD program on parent groups with different types of facilitators situated in settings with different

*Other and equally important data is presented in the remainder of Chapter III,
communication methodologies. The independent variables were parent or educator facilitator type and total or oral communication methodology.

Hypothesis 2 deals with the impact of the program on groups facilitated by parents or educators of the deaf.

Hypothesis 2 (H_o): There will be no significant difference after exposure to the NRMCD program in communication behavior change between groups of parents facilitated by educators of the deaf or groups of parents facilitated by parents of deaf children.

The analyses of variance reported under purposes (2) and (3) yielded no significant differences in impact of the program based on parent or educator facilitation. This finding would permit the acceptance of the null hypothesis 2 and thus, the acceptance of the research hypothesis 2. The implication here would be that the impact of the program on parent and educator facilitated groups should not be expected to differ significantly. This does provide some support for the contention that selected parents are likely to be capable of effectively facilitating parent group education in schools for the deaf.

Hypothesis 3 deals with the impact of the NRMCD program on groups situated in oral or total communication settings.

Hypothesis 3 (H_o): There will be no significant difference after exposure to the NRMCD program in communication behavior change between groups of parents whose children are being educated in a total communication setting or groups of parents whose children are being educated in an oral communication setting.

Parents of children in oral setting tended to report lower
initial scores on the pretest and on the first week of the Communication Behaviors Checklist instrument than did parents of children in total settings. Taking the oral scores' possible regression to the mean into account and applying the analyses of variance to the pre and post-test scores for oral and total parents, no statistically significant differences in impact of the program on parents in oral and total settings were found. This finding would permit an acceptance of the null hypothesis 3 and thus, an acceptance of the research hypothesis. Simply, the impact of the NRMCD program on parents of children in oral or total setting would not be expected to significantly differ based on communication methodology.
(5) To gather information on parents who attend these parent education sessions and to ascertain what they perceive as their major problems with their deaf children.

An attempt was made to assemble test site groups (M₁ groups) which would as closely as possible resemble other groups likely to assemble at and around schools for the deaf with the purpose of parent education. Information yielded by the Demographic Data Sheet (see Appendix IIB) provided information on the people who did actually attend weekly sessions and participated in the instrumentation. The results of Table F - J, when compared with the likely composition of parent groups across the country, suggest similarities between this test population and the future audience for the NRMCD program.

Questions for the Demographic Data questionnaire not presented in Table F - J were not included in Table form because of the M₁ parent unanimity of response on those questions. None of the M₁ parents reported that their deaf child had a handicapped sibling or siblings. All of the parents in the population had only one deaf child. Only one parent reported that the deaf child had a handicap other than deafness; this reported handicap was a deformed ear. Participating parents were primarily English speaking; only one out of the 35 families reported that their household was bilingual.
Table F  Demographic Data for Parents in M₁ Groups (n = 35)

<table>
<thead>
<tr>
<th></th>
<th>M₁OP</th>
<th>M₁OE</th>
<th>M₁TP</th>
<th>M₁TE</th>
<th>% of entire M₁</th>
</tr>
</thead>
<tbody>
<tr>
<td># of female participants</td>
<td>7</td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>71%</td>
</tr>
<tr>
<td># of male participants</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>20%</td>
</tr>
<tr>
<td># of oral communication</td>
<td>11</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>66%</td>
</tr>
<tr>
<td>participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of total communication</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>4</td>
<td>34%</td>
</tr>
<tr>
<td>participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># unable to sign</td>
<td>9</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>57%</td>
</tr>
<tr>
<td># able to sign</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>43%</td>
</tr>
<tr>
<td># of apartment dwellers</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>14%</td>
</tr>
<tr>
<td># of private home</td>
<td>6</td>
<td>13</td>
<td>6</td>
<td>4</td>
<td>83%</td>
</tr>
<tr>
<td>dwellers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># with husband working</td>
<td>4</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>54%</td>
</tr>
<tr>
<td># with husband and wife</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>40%</td>
</tr>
<tr>
<td>working</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This table and the following 4 tables show some pieces of missing data. Parents, on a few occasions, preferred not to provide the information.*
<table>
<thead>
<tr>
<th>children in family</th>
<th>( M_1 \text{OP} )</th>
<th>( M_1 \text{OE} )</th>
<th>( M_1 \text{TP} )</th>
<th>( M_1 \text{TE} )</th>
<th>% of entire ( M_1 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>31%</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>26%</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>14%</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>11%</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3%</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3%</td>
</tr>
</tbody>
</table>
Table H  
Ages of the Deaf Children of the Parents in the M1 Population

<table>
<thead>
<tr>
<th>age</th>
<th>M1OP</th>
<th>M1OE</th>
<th>M1TP</th>
<th>M1TE</th>
<th>% of entire M1 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>11%</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>9%</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
<td>11%</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>11%</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
<td>17%</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td></td>
<td>23%</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>6%</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>3%</td>
</tr>
</tbody>
</table>
Table I  Annual Combined Income for Parents in M₁ Population

<table>
<thead>
<tr>
<th>Income per Year</th>
<th>M₁OP</th>
<th>M₁OE</th>
<th>M₁TP</th>
<th>M₁TE</th>
<th>% of Entire M₁ Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>under $5000.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5000-10000.</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>17%</td>
</tr>
<tr>
<td>10000-15000.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>34%</td>
</tr>
<tr>
<td>15000-20000.</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>31%</td>
</tr>
<tr>
<td>over 20000.</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>14%</td>
</tr>
<tr>
<td>completed level of education</td>
<td>( M_{10P} )</td>
<td>( M_{1OE} )</td>
<td>( M_{1TP} )</td>
<td>( M_{1TE} )</td>
<td>% of entire ( M_1 ) population</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>8th grade</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>high school</td>
<td>4</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>63%</td>
</tr>
<tr>
<td>college</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>26%</td>
</tr>
<tr>
<td>graduate</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>9%</td>
</tr>
</tbody>
</table>
Communication, the transfer of ideas, information or emotions from one source to another, was the major problem identified by the 50 hearing parents of deaf children who attended session 1 of the NRMCD program. Out of the 50 respondents to the Open Forum question: What do you see as your major problem(s) with your deaf child, 35 answered that question with the word communication or several words which approximated that idea. Figure 31 provides a graphic representation of the major problem(s) facing 50 parents of deaf children as they perceive their interaction with their deaf child. Clearly, 70% of the parents isolate communication by word or idea (See Figure 32). The remaining 30% of the respondents focused on concerns like career opportunities, interaction with the majority hearing population, building a positive self concept in the deaf child, and developing the child's understanding of causation and emotions. Although these themes reoccur throughout the parents' response to the Open Forum question, they are not re-articulated frequently and similarly enough to make up isolated major groupings.

Speech is an exception. It shows up as a major concern and interest in this sample of 50 parents from oral and total communication settings. The following statements illustrate the parents' concern. In their own words:

When my child comes from play or school and tries to tell me something that I have no idea of. Until I can find out what he's talking about so I can help him get the sentence out.
Figure 31

Major Problem(s) of Hearing Parents With Their Deaf Children as Perceived by Those Parents at the Commencement of the NRMCD Program (n = 50)

Figure 32

Breakdown of Communication as the Major Problem Perceived by Parents at the Commencement of the NRMCD Program (n = 35)
Making my child realize that she must [parent's emphasis] force herself to speak as clearly as she possibly can (which is quite intelligible) at this time or it will be harder for her as she gets older to change her speech pattern as she begins to recognize the need.

The major problem we have with our child is helping him to understand what we are saying, without signing to him; and understanding what he is trying to tell us, without his having to sign to us.

At the moment, I am having trouble to make out what she is trying to tell me. But my wife tells me what she is saying. . . *

Speech appears as a major identified problem in the oral groups and a lesser problem in the total communication groups. The 4 previous quotes are from the oral MOP (Longmeadow) and MOE (W. Hartford) sites. The total sites see speech as less of a major goal and as more of a means towards achieving another objective. One Framingham parent wrote, "My major problem with my deaf child is getting along with hearing children. His speech is so poor that communication between them lags and hearing children lose interest in him. Consequently, he plays only with his brother and sisters and classmates in school."

The following table describes the percentage of parents in each group who single out speech as a major problem with their deaf child.

The oral parents emphasis on speech is evident.

Table K  COMPARISON by Groups of Parents' Perception of Speech as Major Problem  (n=50)

<table>
<thead>
<tr>
<th>Group</th>
<th>Total n</th>
<th># Identifying speech as Problem</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOP</td>
<td>15</td>
<td>8</td>
<td>53%</td>
</tr>
<tr>
<td>MOE</td>
<td>15</td>
<td>5</td>
<td>33%</td>
</tr>
<tr>
<td>MTP</td>
<td>13</td>
<td>2</td>
<td>15%</td>
</tr>
<tr>
<td>MTE</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*All quotations from parents are not corrected by this writer.
At the end of a 6 week exposure to the NRMCD program, the three remaining experimental groups (MOP, MOE, MTP) were asked the Open Forum question 1: What do you now see as your major problem(s) with your deaf child? This is the same question that they were asked six weeks earlier at the first session of the NRMCD program. Although the n dropped from 50 to 29, the percentage of parents identifying communication by word or idea as their major problem remained stable. After the six week program, 72% of all of the parents singled out communication; prior to the six weeks, 70% had made this identification.

Parents of children who are being educated in total or oral settings do not place identical weight on the problem of communication. When the 3 groups are screen for differences in their identification of major problems, the two groups relying upon the oral methodology identify communication more frequently than the total communication group. The following tables demonstrate this difference.

Table L  Comparison by Groups of Parents Who Identify Communication as Major Problem at Termination of NRMCD Program (n=29)

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>n identifying communication</th>
<th>% identifying communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOP (oral)</td>
<td>8</td>
<td>7</td>
<td>88%</td>
</tr>
<tr>
<td>MOE (oral)</td>
<td>13</td>
<td>11</td>
<td>85%</td>
</tr>
<tr>
<td>MTP (total)</td>
<td>8</td>
<td>3</td>
<td>38%</td>
</tr>
</tbody>
</table>
Table M  Comparison by Groups of Parents Who Identify Communication as Major Problem at Commencement of NRMCD Program  (n=50)

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>n identifying communication</th>
<th>% identifying communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOP</td>
<td>15</td>
<td>13</td>
<td>87%</td>
</tr>
<tr>
<td>MOE</td>
<td>15</td>
<td>11</td>
<td>73%</td>
</tr>
<tr>
<td>MTP</td>
<td>13</td>
<td>7</td>
<td>54%</td>
</tr>
<tr>
<td>MTE</td>
<td>7</td>
<td>7</td>
<td>100%</td>
</tr>
</tbody>
</table>

While the percentages for the open forum responses at the commencement of the program do not show the same widely disparate oral and total perceptions of problems, they do reflect that trend. It is unfortunate that the MTE group did not complete the program; their returns would have increased the value of generalizations about the differences between oral and total groups.

The three groups identified similar additional problems. MTP, MOE and MOP parents wrote about career concerns, bed-wetting and fear of going to bed at night, problems in evaluation of the child's progress, hyperactivity and child management, sharing information about abstractions and causation, and preparation of the child for the pre-teen and teenage period. The post-exposure groups expressed a heightened interest in their child's eventual social relationships. Concern about dating, marriage and interactions with deaf and hearing members of the opposite sex appeared in the responses to Open Forum question 1 at the termination of the NRMCD program. Speech remains a major problem. It was identified by 24% of the parents as a primary concern in their response to Open Forum question 1.
Through the parents' involvement in self-recording for the Communication Behaviors Checklist (see Appendix IIG), additional light was shed on the major concerns and interests of parents of deaf children. When asked to select specific behaviors "that you feel are very important to you and your child... behaviors whose frequencies you wish to increase," parents pinpointed certain areas for improvement. These pinpointed areas appeared in question form in the Communication Behaviors Checklist. Once questions were selected, parents focused their attention on the number of times/day that they performed the selected behavior(s). Parent selection of from one through four of the 41 questions served as indicators of areas of concern or problems, deficits in communication and/or areas with greater potential for interaction.

If a parent chose to checklist a question, this choice was tallied. Each parent was told to select up to 4 questions for checklisting. Larger totals for questions suggested areas in which many parents wished to concentrate to seek "to increase". Smaller question totals indicated limited interest in the question area, limited potential in the area of new communications and already established excellence of communication in that area.

A total of 33 $M_1$ parents made the selections reported in this portion of Chapter III. Their choices are shown in Figures 33 and 34.
These questions which received the highest number of parent selection for checklisting dealt with communication concerning schoolwork, objects of interest in the environment and praise for parentally determined pleasing behaviors.

Several of the questions drew no parental interest in self-recording: questions 4, 5, 6, 9, 17, 8 and 31. These unchosen questions deal with the following areas/opportunities for parent-child interaction:

-- communication about the pleasant things that have happened to her/him;
-- communication about the unpleasant things that have happened to her/him;
-- interaction to point out home situations or locations requiring caution;
-- construction of a behavior rehearsal opportunity for the child to test learning related to avoidance of a dangerous situation;
-- communication about people of importance and/or interest to the child;
-- communication about activities in the environment which might interest the child; and
-- discussion and/or education about social issues.

Other areas/opportunities for communication which received little parental attention (selected by one parent) are shown in Figures 33 and 34.
These figures indicate which questions received what amounts of parental attention and the parents' group affiliation.

Questions 1, 8, 16, 20, 23, 27, 28, 37, 39 and 41 received the most (4 or more selections) decisions by parents to checklist. These selected questions deal with the following areas/opportunities for parent-child interaction:

-- communication about the child's schoolwork;
-- education to avoid dangerous situations in the home and the community;
-- communication about events, objects, or incidents the parent and child happen upon together;
-- praise of something the child is doing which pleases the parent;
-- communication and/or interpretation of the action and dialogue of a television program;
-- creation of an environment which would encourage the child's more active participation in meal time conversation;
-- expression in a physical manner of affection towards the child;
-- encouragement and solicitation of the child's opinions or reactions; and
-- inquiry into whether the child is understanding the events or conversations which are going on around him/her.

Of these frequently selected communication areas and/or opportunities, question 1, 16 and 20 received the most decisions by parents.
Special interest in the differing areas for communication did not seem to be limited to one group over another. The one exception to this generalization is found in the selection of question 41. As can be seen in Figure 34, only M10E parents focused on this question. There would be a tangible need in a home which adheres strictly to an oral communication methodology to frequently ask the child for feedback on the effectiveness of their chosen channel of communication. It is surprising that no M1OP parents made that selection. This is not to say, however, that parents using total communication should not or do not need to make those frequent solicitations of feedback also.

Because of the nature of the high and low frequency questions selected, it is likely that the questions with higher frequencies are in areas with high potential for parent-child interaction and a far lower actuality of frequency of interaction. This surmisal was confirmed through informal discussions with several M1 parents. They did, in fact, choose communication area questions which looked like promising and needed content for interaction, but which were also deficit areas in their interactions with their deaf child.

Similar information about the unchosen questions was not solicited from parents. The list of areas/opportunities within the unchosen category leads to an identification of levels of specificity as the primary deterrent. Whereas parents wished to increase their education about areas for caution in the home and community, it is likely that they did not see as much potential for daily checklisting
in only one of these locales. Whereas they wished to focus on schoolwork, they did not choose to focus on the pleasant things— or the unpleasant things that happened in isolation from a broader locale. The same hesitation was seen in the failure to choose questions 17 or 18. The fact that people and then activities were treated separately was probably seen by parents as offering fewer opportunities for interaction. Question 16 (in the highly chosen group) pinpoints the broader category of objects and offers examples found in the home and the community.

The major areas of concern and/or problems may also be the major areas of potential for interaction between the parent and the child. This analysis of the Communication Behaviors Check-list reaffirms that assumption. The problems, concerns and promises of parent-child communication are not esoteric—they exist at the dinner table, the pantry shelf and the kitchen sink.
Figure 34

SELECTION OF QUESTIONS BY M1 PARENTS FOR THE COMMUNICATION BEHAVIORS CHECKLIST (cont'd.)

Frequency of Selection by Parents

<table>
<thead>
<tr>
<th>Question #</th>
<th>21</th>
<th>22</th>
<th>23</th>
<th>24</th>
<th>25</th>
<th>26</th>
<th>27</th>
<th>28</th>
<th>29</th>
<th>30</th>
<th>31</th>
<th>32</th>
<th>33</th>
<th>34</th>
<th>35</th>
<th>36</th>
<th>37</th>
<th>38</th>
<th>39</th>
<th>40</th>
<th>41</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1 OP</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1 OE</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1 TP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(6) To measure the NRMCD program's effect on group processes in varied and usual settings.

The NRMCD program centers around a set of open-ended visuals and the impact that these visuals have on a group of parents of deaf children. Designed to be utilized with gatherings of parents and a facilitator of these groups of parents, the materials should stimulate parent-parent and parent-facilitator interaction.

A one-way analysis of variance was used to examine the type and quantity of interactions which occurred during the parent education sessions. The researcher visited each group during its utilization of the NRMCD program and recorded the type and quantity of interactions. These observations were recorded on an Interaction Descriptor (see Appendix IIA), a form designed for this study and based on the Flanders Interaction System. Each time interaction (comment, opinion, questioning, supporting, etc.) occurred and involved a participant, the observer gave the individual 1 credit. At the end of the session, individuals had received a parent-facilitator total, a parent-parent total and an individual grand total. This recording and concomitant analysis permitted the researcher to compare the impact of the program on the three M₁ groups which were observed.** Because all three groups were analyzed in light of the parent-facilitator interchanges, the parent-parent interchanges

*Summary Tables for the analyses of variance are provided in Appendices III D-F.

**Suggestions for the application of this procedure with parent education control groups from the same sites will be discussed in Chapter IV as a possible improvement in the study.
and the individual interaction totals, this analysis provided a
description of the varying interactions which went on in the three
groups and permitted a description of groups which could not be
assumed to be random.

The groups did not have the same n or the same types and quantities
of interactions. The following Table N provides a description of
the interactions in the groups which led to the results in the one-way
analyses of variance.

Table N  Mean Quantity and Type of Interactions for \( M_1 \) Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>( M_{\text{parent-facilitator}} )</th>
<th>( M_{\text{parent-parent}} )</th>
<th>( M_{\text{individual}} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( M_1\text{OP} )</td>
<td>7</td>
<td>12.29</td>
<td>19.29</td>
<td>31.57</td>
</tr>
<tr>
<td>( M_1\text{OE} )</td>
<td>14</td>
<td>6.07</td>
<td>8.0</td>
<td>14.07</td>
</tr>
<tr>
<td>( M_1\text{TP} )</td>
<td>9</td>
<td>15.11</td>
<td>22.33</td>
<td>37.66</td>
</tr>
</tbody>
</table>

Clearly the small number of parents in the groups contributed
to a Type II error. Still the data suggest that the significant
difference in the parent-parent and individual mean interchanges
were probably attributable to the large quantity of \( M_1\text{TP} \) exchanges.
It is also interesting to note the greater mean of parent-parent
interactions than parent-facilitator interactions in all 3 groups.
The \( M_1\text{OE} \) group, the group with the largest n and an educator facil-
itator, did not show the same pronounced gap in the quantity of the
different types of interactions. A substantiation for the recommenda-
tion to diminish size of groups implementing the NRMCD program should
by pointed out here. The individual number of interactions in the
M_1OE group was significantly less than the other groups. Certainly, it is plausible to attribute this difference to the size of the group. While there was not a significant difference in parent-facilitator quantity of interchanges, there was that significance in parent-parent interaction. Because of the gap between the educator facilitated and parent-facilitated totals, it is possible that this may have been due to the different orientations and priorities of these 3 individuals based on their parent or educator roles.

Separate analyses of variance were carried out on the parent-parent, parent-facilitator and individual parent totals. An estimation procedure of least squares was utilized. No significant differences were obtained on the parent-facilitator totals. This was not the case in the other two categories. The groups differed significantly in number of parent-parent exchanges. (F (2, 27) = 5.775; p≤ .01) They also differed significantly in individual parent totals (F (2, 27) = 9.888; p≤ .01). Again, the reasons for these differences might have been attributed to varying n size or variations in leadership behaviors of the facilitators.

While recording for the Interaction Descriptor, the following observations were made. These observations were utilized in decision-making about necessary changes in emphases in the facilitator's manual.

(1) There was a tendency to discuss theories of child rearing. Parents and facilitators made statements like,
"One really should avoid arguing in front of the children", or "Parents of the deaf must remember to include their deaf children in as much dialogue as possible."

(2) Parents only rarely owned the concerns, problems or decision points depicted in the visuals. Few "I" statements were made.

(3) Off-task dialogue was frequent, especially when some of the more controversial or emotional transparencies were projected.

(4) Facilitators did not focus on individual parents. They did not ask parents to relate how the visuals affected them as individuals. Instead, they permitted and encouraged the talk to focus on general problems for parents of the deaf, rather than individualized needs and strategies for meeting these needs.

(5) Facilitators hesitated to move off-task dialogue on to task.

(6) Facilitators failed to ask parents about specific and desirable changes that they would like to make and how to bring these changes about.

(7) Facilitators made few specific suggestions to parents.
to make generalizations about communication strengths and weaknesses as perceived by parents of deaf children.

Results reported in response to (7) are based on responses to pre and post test questionnaires (see Appendix IIE). These questionnaires, derived from parents' operationalization of "effective parent-child communication" as included in the facilitator's manual Parent-Child Communication (Appendix IB), Parent Behaviors, Part IV, asked parents to self-report the approximate number of times/week that they performed specific behaviors. This self-reporting for all of the parents in all of the groups and for comparisons of specific groups would shed light on the communication strengths and weaknesses of parents of the deaf - as they themselves see these strengths and weaknesses. The offered range of possible frequency of response for parents went from less than 1/week to a maximum frequency of 10 times/week. Parents also were offered an option of checking N.A. (not applicable); the choice of this option was discouraged by facilitators and by written directions to parents who provided their input via the mails.

Parents' responses to the 30 question questionnaire were tallied. Analysis of the total frequency score for individual questions pointed out trends in communication strengths and weaknesses for parents of deaf children, in general, and for parents in the differing groups with their differing communication methodologies or differing exposures to the program. Concern with the impact of
of facilitator type, the third independent variable, was not exercised in this portion of Chapter III. Whereas oral or total communication methodology and exposure to NRMCD program might have influenced these trends, educator or parent group facilitation should not have had this influence on selection and scoring of different questions by parents.

In order to arrive at a total for individual questions, response of one through ten times/week were counted as marked by parents in their self-reporting. Parents who checked "less than 1 time/week" were credited with 1/2 for the questions marked in that fashion. This 1/2 was chosen after asking several parents what their selection of that box meant and noting their most frequent response of "every other week or so". This response and the ease of assigning 1/2 to questions marked in that way contributed to this method of tallying.

Comparison of pre and post-tests as well as comparisons between M₁ and M₃, oral and total groups on responses to questions were made. Again, M₂ data was not included because of the parents failure to provide the checklists in addition to the pre and post-tests. Pre and post-test frequency scores for individual questions from all of the responding parents were tallied. These tallied scores were then divided by the maximum potential score for any individual question, i.e. divided by the total number of responding parents X 10 (the maximum possible frequency of behavior provided for in the questionnaire.) These results are shown in Appendix IVA, B and C.*

* See Appendix IV, Tables A - M.
Additional comparisons were based on group frequency of response for an individual question divided by the maximum possible group response for an individual question, i.e. divided by the number of people in the group X 10 (the maximum possible frequency of behavior provided for in the questionnaire.) These results are shown in Tables IVD, IVE, IVF, IVG, IVJ, IVK, IVL, and IVM which are tables based on percentages of the maximum potential total for each question. Questions treated in these comparisons are those which have achieved either an average of 25% or more above the maximum potential total frequency or an average of 10% or less than the maximum potential total frequency. Thus, questions treated in those eight tables are those that received high numerical scores (25% or better of potential) or low numerical scores (10% or less than potential.) These results display percentage of response from parents in M1 (NRMCD procedures, pre and post, communication behavior checklists) and M3 groups (pre and post-tests through the mail) and total and oral communication methodology settings. Breakdowns and comparisons by those independent variables are shown in Tables IVA - M in Appendix IV.

Comparisons of trends in parent communication behavior (as measured by the pre and post-tests) can be inferred from the tables which focus on change scores. Oral and total groups, and M1 and M3 groups are looked at in light of changes in their percentage of response from pre to post-test. Tables IVH and I offer those comparisons.
Perusal of the Tables IVA-M yields some trends in parent communication strengths and weaknesses. These trends emerge from consideration of the percentages of parent response within the different question categories. High percentages suggest a greater frequency of that particular parent behavior with the deaf child; low percentages suggest a lower frequency of parent behavior in that area. These results are considered "suggestive" rather than definitive for several reasons:

(1) Opportunity for performance of the 30 behavior classes called for in the pre/post instrument is not equal, e.g., the potential number of opportunities to clarify an inter-parent dispute is presumably not equal to the number of potential opportunities for involving a child in a telephone conversation. Thus, although all questions were computed with the same maximum potential frequency, they cannot be regarded with the same expectations.

(2) Many of the questions which deal with parent behaviors with adolescent children could not or would not be carried out by a parent of a younger child. Demographic data on the M1 groups demonstrates that although there are no parents of teenagers in the sample, there are still many 8, 9, 10 and 11 year olds who would have need of these types of interactions. M3 data, which makes up 64% of the total returns used in looking at these communication trends, would not suffer from this weakness.

Parents of children of varying ages were included in the mailing population and thus, presumably, in the returns.

(3) Several (3) of the groups suffered from a low
number of returns. While the total response - in terms of number of parents providing data on their interactions with their deaf children - is quite large (116 parents), three of the individual groups had a pre or post-test n of under 6. Percentages figured from that kind of n would be questionable.

(4) As has been mentioned previously, M1 TE did not complete the program, and thus, provided no post-tests. The reasons for this will be further elaborated upon in Chapter IV. This failure to complete caused the expected problems of incomplete data. Comparisons between groups in communication strengths and weaknesses in specific areas were more difficult to unearth because of this missing data.

While taking these reservations into account, it is still important to recognize that parents did look at their interactions with their deaf children and seek to approximate their frequency in selected categories. This analysis and approximation suggests what parents think they do more frequently and less frequently with their deaf children. That, in itself, is significant data for parent educators and for school personnel who work with deaf children. The following trends emerge from a pre/post-test item analysis.

1. All parents (in M1 and M3 groups, oral and total settings) saw themselves as frequently (40% or more) communicating in the following areas: encouraging the deaf child's play with hearing peers; encouraging the deaf child's communication with hearing peers; asking for the deaf child's opinions and reactions during
family conversations; asking the deaf child to relate an incident in his/her day; and communicating with the child about friends and friendships. Discussion of the parent's work with the child is another area of frequent communication; it was scored by parents with 35% of potential maximum frequency. Table IVA and B display the percentage figures for these interactions.

2. When percentages for all of the parents in all of the groups are examined, the following six areas received a parental response which related the lowest frequencies of behavior: communicating about dating, in general; communicating about dating hearing people; encouraging the deaf child's questions about male/female relationships; communicating about social issues like war, VD, women's rights; and clarifying heated parental interactions. While these areas received the lowest frequency scores (8.5% or below), other areas were not far behind in low frequency: encouraging child's discussion of feelings about being deaf and questions about religion. Tables IVA and C display these results.

3. Percentages in Table IVB suggest that parents tend to urge communication and play with hearing peers more often than encouragement of the child's relation of an incident in his/her day or observation of television together. Percentages for the encouragement of interaction with peers range between 50% and 70%, an extremely high frequency figure. Another high percentage figure is the response to questions 24/15 and 17/27. These questions also
deal with facilitating the social interaction of the young deaf child in the hearing world. Clearly, this facilitation receives considerable effort from these parents of the young deaf child.

4. Examination of Table IVA suggests that parents of deaf children are more likely to communicate with their deaf children about other handicaps than they are to discuss the child's feelings about his/her own handicap of deafness.

5. Percentage scores on cognitive input questions are considerably lower than percentage scores for early social facilitation. Parents judge themselves as less frequently explaining or involving the child with the telephone, providing language input through childhood games, and/or dealing with the abstractions implicit in religious education than they see themselves encouraging interactions with peers.

6. Total communication groups tended to be considerably more optimistic in their self-reporting of frequency of communication behaviors with their deaf children. This might be attributed to optimism or actuality. Tables IVD and E reflect this trend. Total groups scored higher in areas where ability to deal with abstractions was involved, e.g., social issues, dating, male/female interactions, career options and feelings about the handicap. Table IVF suggests that total parents made more frequent communications with the following contents: people at social gatherings; parents' work; family telephone conversations; and friends and friendships.

7. Parents in regularly meeting groups (M1) and parents
providing data through the mails (M3) show a different pattern of response. M3 respondents were far more optimistic about their performance of communication behaviors with their children, especially in below 10% questions. The information that only 11% of the individual group's responses were under 1% of maximum potential in the M3 groups, whereas 23% were under the 1% mark in the M1 groups, can be seen in Tables IVG and E.

8. Groups (and presumably individual parents within the groups) with lower frequency scores for the pretest made greater leaps in post-test frequency scores. The oral groups, with their lower original scores, were affected by this. M1OP provides the best example. After exposure to NRMCD procedures and testing, M1OP made gains in these tangible content areas for communication: asking the child's opinions and reactions; asking the child to relate an incident in his/her day; communicating with the child about friends and friendship; discussing parents' work with the child; and sharing reactions to a social gathering. Table IVH presents the percentages from which the above generalizations emerge. Table IVJ presents data which shows that the M1OP group's frequency of behaviors increased for all eight of the below 10% question group. The M1OE group shows an increase for 7 out of the 8 questions. The greatest leaps in these below 10% question areas dealt with discussing dating, clarifying adult interactions and sharing feelings about deafness.

9. Examination of the below 10% of potential frequency questions (Table IVI) suggests that the NRMCD procedures influenced
parent response within the below 10% question areas. 79% of the M1 groups increased in reported frequency of behaviors; 12.5% diminished and 2 made no percentage change. In M3 groups, 50% made an increase in frequency of communication behaviors; 34% diminished from pre to post-test and 5% made no change in percentage.

10. Lower (below 10%) and middle scores (not shown in the various breakdown tables) show stronger gain from pre to post-test. Table 0 shows that 63% of the questions increased, 25% remained the same and 1 out of 8 or 12.5% made a slight decrease. The higher questions (above 25%) show a decrease from pre to post-test.

11. Some additional and specific strengths and weaknesses in communication between hearing parents and their deaf children suggested by this analysis of the pre and post-tests are as follows:

-- There is little birth/sex education communication going on between hearing parents and their deaf children.

-- Parents of the deaf communicate with their children about interactions with hearing peers more frequently than they encourage their child to take part in community activities.

-- Parents of the deaf only minimally interact with their child through sports and sports events (observation and participation).

-- There is a higher frequency of inclusion of the deaf child in the family's religious activities than in creating an environment to encourage the child's questions about religion.

-- Communication surrounding the controversial
and/or the abstract is very limited, especially in oral communication households. Focus on social issues is greater in total communication groups (Tables IVG and E). Table F shows trend in $M_3$ groups which suggests that total groups deal more frequently with the abstractions implicit in religious discussions.

This portion of this section did not focus on change scores. Rather it was an opportunity to look at parents' self-reportage of the frequency of specified communication behaviors with their deaf children. Parents were looked at as a large group and then as smaller groups with special characteristics and resulting trends in communication strengths and weaknesses that might have been related to these characteristics. The implications of this item analysis are further discussed in Chapter IV.
(8) To utilize evaluative information to make generalizations about the strengths and weaknesses of the program.

At the termination of the NRMCD program, subjects were asked five Open Forum Questions. Question 1 and the responses to it were discussed under purpose (5). Questions 2, 3, 4 and 5 are used to respond to this particular purpose. In these questions, parents were asked for their subjective reactions to the NRMCD program. The following questions were asked:

(2) Do you have any comments (favorable or unfavorable) on this six week parent education program?
(3) What did you enjoy most about the sessions?
(4) What changes would you make in this program?
(5) Comments and/or opinions:

The three responding groups (MOP, MOE, MTP) yielded somewhat different reactions to the program. The following table demonstrates their reactions:

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Favorable</th>
<th>Unfavorable</th>
<th>Mixed</th>
<th>Not my Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOP</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>MOE</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>MTP</td>
<td>9</td>
<td>7</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Comparison of the group responses through percentages provides easier comparisons. Table P makes that percentage comparison.
Table P  Comparison by Group of Percentage Responding Favorably, Unfavorably or Mixed to Program

<table>
<thead>
<tr>
<th>Group</th>
<th>% Favorable</th>
<th>% Unfavorable</th>
<th>% Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOP</td>
<td>67%</td>
<td>0</td>
<td>33%</td>
</tr>
<tr>
<td>MOE</td>
<td>38%</td>
<td>23%</td>
<td>31%</td>
</tr>
<tr>
<td>MTP</td>
<td>78%</td>
<td>0</td>
<td>22%</td>
</tr>
</tbody>
</table>

Question 2 provided parents with an opportunity to make specific criticisms of the program and suggestions for its alteration. Their listing of unfavorable facets of the program (as well as their listing of its favorable components) is an important result of Open Forum Question 2.

Group MOP listed these criticisms:

(1) Some of the transparencies were unrealistic.

(2) There were two negative reactions to the effectiveness of the facilitator.

Group MOE listed these criticisms:

(1) The problems of a child who has had several years of hearing and then loses that hearing (adventitious hearing) were not treated.

(2) There were too many parents in the group.

(3) Once/week scheduling was too frequent.

(4) Once/week scheduling was not often enough.

(5) The transparencies were unrealistic; "Many of our children get treated the same as normal children."
(6) Visuals focus on scenes of a child being educated in a residential, manual setting.

(7) The test instruments were strongly disliked and mentioned by several parents.

(8) The program was a repetition of the John Tracy Clinic, a home correspondence course which offers early oral language training for pre-school deaf children.

(9) Facilitator needs to individualize program to meet needs of specific parents with whom she/he is dealing.

And Group MTP listed these criticisms:

(1) The early portion of the program was "old hat."

(2) Sessions should have more parents of children of varying ages.

(3) More parents should have attended the sessions.

(4) The "slides" which show deaf children being left out were not liked.

Question 2 also yielded a listing of the strengths of the program.

The strengths of the program, as seen by the MOP group, were as follows:

(1) It (the program) raises larger issues, helping parents go beyond dealing with everyday problems into deeper inquiry.

(2) It offers a chance to let out anxieties.

(3) It gives parents of younger children an opportunity to interact with parents of older children and therefore, to take a look into the future.

(4) The idea of communication behavior checklisting was liked and will be used by a few parents as a check on themselves in the future.
The MOE group listed the following favorable facets of the program:

(1) It (the program) helps parents see everyday situations as possible parent-child communication situations.

(2) The checklisting was a useful tool for two of the respondents.

(3) The sessions and visuals provide an opportunity to air feelings.

(4) It would be especially effective for parents of young deaf children.

"I sincerely feel that for the parent of the very young (or newly stricken) deaf child this course is superior to any that I have attended because of the discussions and exchange of ideas brought out by the film strips [SIC]. It's a very beneficial group therapy session with lots of information crossing the table."

(5) It makes parents more aware of their special responsibilities to a deaf child.

(6) It yielded an improvement in the parent-child relationship.

The MTP parents listed these favorable reactions:

(1) The program was "interesting".

(2) It provided an opportunity for parents to be together and to be honest.

(3) It should be available to all parents to "help them avoid the misery we've all experienced."

(4) It helped many parents realize that they were not alone in their problems.
(5) Parents had an opportunity to share ideas.

(6) Some liked the program "for its companionship and its stimulating and frank discussions of every day problems."

(7) It gave parents an opportunity to do what they perceived they needed to do— to talk with other parents.

Open Forum Question 3 provides additional data on the strengths of the program. In response to the question, what did you enjoy most about the NRMCD program, the groups of parents showed very similar subjective reactions. The question often evoked several "most enjoyables) about the program. These unprompted multiple responses account for the fact that the number of responses totals more enjoyable features of the program than the n of parents responding to the Open Forum Questions.

Table Q  Most Enjoyable Features of the NRMCD Parent Program As Identified by Parents in M7OP Group At Termination of Program.  (n=6)

<table>
<thead>
<tr>
<th>Strengths in program</th>
<th># identifying strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunity to learn from other parents</td>
<td>7</td>
</tr>
<tr>
<td>Advice on how to handle current problems</td>
<td>3</td>
</tr>
<tr>
<td>Opportunity to hear about older children and to prepare for future</td>
<td>3</td>
</tr>
<tr>
<td>Approval of the visuals and the discussion</td>
<td>2</td>
</tr>
</tbody>
</table>
Table R  
**Most Enjoyable Features of the NRMCD Parent Program As Identified by Parents in ME Group At Termination of Program (n=13)**

<table>
<thead>
<tr>
<th>Strengths in program</th>
<th># identifying strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval of Open discussion</td>
<td>2</td>
</tr>
<tr>
<td>Opportunity to learn from other parents</td>
<td>8</td>
</tr>
<tr>
<td>Provides emotional reassurance</td>
<td>2</td>
</tr>
<tr>
<td>Opportunity for resource sharing</td>
<td>8</td>
</tr>
<tr>
<td>Opportunity to air feelings</td>
<td>3</td>
</tr>
<tr>
<td>Opportunity to get to know other parents</td>
<td>7</td>
</tr>
<tr>
<td>Opportunity to get to know parents of older children</td>
<td>2</td>
</tr>
<tr>
<td>Opportunity to look at future of our deaf children</td>
<td>3</td>
</tr>
</tbody>
</table>

Table S  
**Most Enjoyable Features of the NRMCD Parent Program As Identified by Parents in MTP Group At Termination of Program (n=9)**

<table>
<thead>
<tr>
<th>Strengths in program</th>
<th># identifying strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion with other parents</td>
<td>8</td>
</tr>
<tr>
<td>Discussion of communication as an issue</td>
<td>1</td>
</tr>
<tr>
<td>Sharing feelings with other parents</td>
<td>1</td>
</tr>
<tr>
<td>Approval of informality of discussion generated by visuals</td>
<td>2</td>
</tr>
</tbody>
</table>
Open Forum Question 4 asked for suggestions for changes in the NRMCD program. Parents offered specific suggestions for alterations. The following is a paraphrase of the changes offered by the different group of parents. Suggestions may have come from only one parent. They do not necessarily reflect group opinion.

Parents in MOP made the following suggestions:

(1) There should be a neutral facilitator.

(2) Groups should be assembled on the basis of the age of the child. Parents of children of the same age should be grouped together.

(3) Parents should be given more suggestions for possible answers to their children's questions.

(4) Group should focus more on "how to handle certain situations rather than so much free discussion."

The MOE parents offered the following changes in the program:

(1) The pre and post-test questionnaire should be improved.

(2) More visuals should be focused on 7 - 14 year olds.

(3) There is a need for the inclusion of more parents of deaf teenagers.

(4) Expand the program so that mothers and fathers can attend.

(5) Limit discussion of visuals to no more than 15 minutes.

(6) Increase the attendance of parents.

(7) Meetings should be scheduled on an every other week basis.

(8) Include deaf adolescents and their parents in the groups.
(9) Groups should be assembled on the basis of the age of the child. Parents of children of the same age should be grouped together.

The MTP offered the suggestions:

(1) The pre and post-test questionnaire should be improved.
(2) Question following the visuals should not be repeated over and over again.
(3) The parent education sessions should be longer (in weeks?) and have more continuity.
(4) Deaf adults should be included in the program.

Open Forum Question 5 gave parents an opportunity to say what they had not yet said as their subjective response to the program.

The MOP group had the following additional comments:

(1) The program was enjoyable but they had need of a better group leader.
(2) One parent was grateful that her child is not profoundly deaf.
(3) The behavior checklisting was fatiguing.

The MOE offered these comments:

(1) "Thank you."
(2) More emphasis on day school students should appear in the visuals.
(3) Include more ideas for home learning activities within the program; try to create a "teacher training program for parents."
MTP made these additional comments:

(1) There should be more sessions in the program.

(2) It is a "good program."

(3) Several parents wished more parents would get involved with similar programs.

(4) There is a need for ideas of how to reach more parents.

The information gleaned from Open Forum Questions 2, 3, 4 and 5 has been used to present the subjects', parents of deaf children enrolled in the field test schools, assessment of strengths and weaknesses in the NRMCD program. When combined with data from the pre and post-test instrument and the Communication Behaviors Check-list, varying impressions of the impact of the program are yielded. Additional conclusions based on the results and leading to a discussion of the implications of this study and recommendations for improvements are included in Chapter IV.
CHAPTER IV

Discussion

Chapter IV includes a summary of the development, the format and the impact of the NRMCD parent education program. Chapter IV also includes a discussion of suggested improvements in the study and changes and additions in the NRMCD program based on the formative evaluation which has been described in this document. Following the detailing of improvements in the study and the programs, some implications for additional research and program development are included.

A discussion of the major findings and concerns unearthed by this evaluation serve as the conclusion for this chapter and this dissertation.
Summary. When asked to state the major problem(s) with his/her deaf child, one parent wrote, "At meal time he interrupts us to ask us what we are talking about. He wants to know every word we're saying. Also he keeps asking us what they're saying on TV." The parental frustration implicit in this quotation is surpassed only by that of the child this parent is describing.

The deaf child's need to participate in family communication and to rely on the family for interpretation of surrounding communication has been extensively documented in this dissertation. It is this frustration at communication deficits which, in the fall of 1972, led to the initiation of the NRMCD parent education program. This initiation occurred at a gathering of deaf adolescents. When queried about their concerns, the areas in which they had need of programmatic assistance, they unanimously identified communication with their hearing parents. Contacts with parents, educators and administrators of the deaf confirmed and further defined the problem. Through a series of developmental sessions which relied heavily on parent feedback, the NRMCD mediated program took shape. The format of the program is a series of open-ended visuals and a facilitator's manual designed to be utilized with groups of hearing parents of deaf children. The content of the program is the experiences of parents and deaf children. It is based on the lives of these parents
and their deaf children caught and held at decision and/or interaction points in their relationship with each other. Frozen in time and space and boldly projected on a wall or screen, the open-ended transparencies depict most parents of the deaf and their deaf children as they are or as they were or as they most likely will be.

In recognition of the inevitable variety of individual and group concerns, the visuals are designed to be open-ended. While there are certain patterns of incidents in the interaction between deaf children and hearing parents, the open-ended, stimulus nature of the materials encourages individual and personal responses. The facilitator's manual enables the group leader to predict and utilize these varied responses to the visuals. It also provides suggestions for parent behaviors which will increase and enhance communication between parent and child. In addition to procedures for utilization and goals for parent communication behaviors, the manual includes a listing of people, place and print resources related to deafness and parenting.

Even before the test draft of the facilitator's manual for the NRMCD program was completed, over a hundred requests for information or materials were received. It was decided that field testing, the formative evaluation described in Chapters I, II and III, must take place prior to the distribution of the program. The programmatic changes which have resulted from this formative evaluation are described in this Chapter and are now incorporated into the finalized version of the NRMCD parent-child
The formative evaluation gathered information in several ways. Through two major instruments, purpose (9) to determine the impact of the NRMCD parent-child communication program on the communication behaviors of hearing parents of deaf children, was addressed. The pre and post-test and Communication Behaviors Checklist instruments provided numerical data on the baseline quantity of parent communication behaviors, the frequency of these behaviors over time and the frequency of these behaviors at the conclusion of the program. An analysis of variance of pre and post-test scores for the impact of the program on the different groups (groups which met weekly and experienced contact with the visuals and a facilitator or groups participating through the mails, groups in oral settings or total settings, groups with parent or educator facilitation) yielded no significant differences in the impact of the program based on these independent variables. Although the reliability of the pre/post-test instrument is questioned, it is still essential to reiterate the consideration of the research hypotheses. Hypothesis 1, anticipating in increase in parent communication behavior after exposure to the NRMCD program, was rejected based on the results of analyses of pre/post-test scores. A wholesale rejection was withheld because of the additional quantitative feedback provided by the Communication Behaviors Checklist instrument. Results from
this measurer showed that in two out of the three $M_1$ groups, the majority of parents increased their frequency of parent-selected communication behaviors from week 1 to week 6. When all of the parents who completed checklisting were examined, 63% showed gains in frequency of communication behaviors, and many of them showed very large gains. While the pre/post-test analyses did not suggest that the NRMCD program increased parent communication behaviors with their deaf children, the Checklist instrument, unfortunately an instrument without a control group, suggested that it did.

Hypotheses 2 and 3 were accepted. When scores for the pre/post-test were analyzed, there were no significant differences in the impact of the program based on oral or total setting or parent or educator facilitation. This acceptance of Hypotheses 2 and 3 encourages utilization of the NRMCD program in schools with oral or total communication methodologies and with parent or educator facilitation.

The impact of the NRMCD program was also determined by a series of Open Forum Questions. These questions asked for subjective reactions to the program and for suggestions as to the improvement of it. Table P presents the general reactions to the NRMCD program. Responses were predominantly positive. The following comments are representative of statements by parents at the termination of the program:

*The expression "misery loves company" has a special

*Parents' words, spelling, punctuation and syntax are their own.
meaning when you happen to be the parent of a handicapped child. When you are within the confines of your own home and have the time to look at your child and think about his desires, his ambitions, his loves, his frustrations and above all - his future in this world of ours, it very often becomes discouraging and downright depressing. But when you can share your thoughts with others who have the same problems, the load lightens and the road ahead doesn't seem so dark anymore. Yes, I enjoyed the program, not only for its companionship but for its stimulating and frank discussions of everyday problems. (M1TP parent)

I feel that the parent education program was especially beneficial in that many common everyday situations were pointed out as being possible communication experiences for parent and child. Having to checklist made me more aware of communication in areas other than those that I was especially working on. (M1OE parent)

The most favorable outcome of this program is that through the transparencies we looked back on some of the problems we faced as parents of deaf children - but more importantly we came to realize some of the problems that our children will face as adolescents. It was most beneficial to hear from other parents. (M1OP parent)

The majority of the parent sampling very much liked the experience shaped by the NRMCD program. They appreciated the opportunity to communicate with each other, to look to the future, to share feelings and resources with other parents, and to discuss communication as a separate and strategic issue. Although the statistical analyses of the pre and post-tests indicated questionable numerical impact on behavior frequency, subjective responses from facilitators and parents indicated that they had had a meaningful experience. Parents wanted more parents involved in the program. Parents wanted additional weeks and additional
participants (siblings, grandparents, etc.) in the program. Parents wanted their spouses to have the same experience. And parents wanted to know where and who would be the next to utilize the NRMCD program.

Because the results yielded by the pre and post-test, the Communication Behaviors Checklist and the Open Forum Questions provided a somewhat ambiguous picture, it is useful to look at this formative evaluation with hindsight. That examination of what has been done points inevitably to what should have been done. This is then tempered by what could have been done.
**Improvements in the Study.** Although this formative evaluation fulfilled its primary goals - those of looking at the impact of the NRMCD parent-child communication program and of gathering data on which to base improvements in that program - there were still some flaws in the formative evaluation procedures. These will be treated in the following basic areas: instrumentation; numbers of subjects, and design reliance upon three forms of exposure. Each of these areas is discussed in the paragraphs that follow. Suggestions for improvements likely to avoid the flaws in the evaluation are included.

Although the pre and post-test instrument went through a minimum of four major revisions prior to its utilization, it still was criticized by the parents who were tested by it. Their responses to this instrument and a retrospective examination of it leads to suggestions for changes in the instrument. The pre/post-test should not have provided parents with reporting options limited to weekly frequencies. Many of the behaviors asked about had likely occurrences of once/month or once/year. Parents should have been able to check the provided options or to fill in their own frequencies. Other questions limited parents to frequency approximations where a yes/no option would have been more appropriate. Another improvement in the instrument would be based on the questions relating to interactions with children of varying ages. Since all parents were expected to answer all
questions, parents felt uncomfortable when they had to keep checking N.A. because their child was too young or too old. In the description of the N.A. (not applicable) category of response, parents should have been told about the presence of questions asking about communication content inappropriate for the age and maturity of their particular child. If this information and a place to record the child's age had been included in the pre/post-test instrument, parental response would have been more positive. A final improvement in the pre/post-test would be the addition of two open-ended questions: What do you see as the things that you do which help you to communicate with your deaf child? What do you think you need to do to more effectively communicate with this child? The open options would have given parents an opportunity to relate the strengths and weaknesses of their own unique situation and would clarify the mistaken impression that the pre/post instrument was an absolute and inclusive listing of all those communication behaviors which must exist in every home with a deaf child.

The Communication Behaviors Checklist did not present the same problems. Parents were able to fill in their own frequencies and to select the behaviors for which they were measuring frequencies. One improvement in this instrument would be the inclusion of some kind of a reinforcer for the rigors of checklisting. An automatic frequency counter, offered to M1 and M2 parents who agreed to do the five weeks of checklisting, might
have served as such a reinforcer, at least until the increase in behaviors was noticeable enough to serve that function itself.

As was anticipated, parents did not consistently attend NRMCD program sessions, fill out data gathering instruments either through the mails or in weekly sessions, or checklist home behaviors. This anticipated, spotty participation led to low and varying numbers of parents providing data for evaluation purposes. Administrators of potential test sites were asked to assure a minimal \( M_{1} \) of 15 before the program was given to them. They all made those assurances. Their assurances, however, did not suffice to maintain parent participation at group meetings. They also had no control over the number of mail-in responses. This lack of control and ability to guarantee participation led to varying amounts of participation in varying settings and the resulting problems of analyses of non-orthogonal information.

The most serious parent participation problems were in the Mj^TE, Washington, D.C. site. Here, the strained relationship between school and parent community led to broken promises of attendance. Although the facilitator, a woman indigenous to the community, expressed strongly positive feelings about the program and continues to express those feelings, administration-parent tensions drew the focus away from the NRMCD program. Ms. B described the climate in the following way:

The parent-professional climate at Kendall is at a very low ebb during this year (1973). There has been a complete administrative change due to parent pressure.
Parents, teachers, and administrators have been placed into positions of opposition. Attempts are being made to build in more parent and faculty policy control through the development of a Policy Advisory Board consisting of parents, faculty and administrators. These efforts have been deadlocked over several months because the three factions have been unable to mutually agree on all of the fine points of the make-up and function of the board. The difficulties with the aforementioned efforts has oozed into almost every aspect of the Kendall program. Parent and Professional attitudes have all been negatively affected at least to a minor degree. Resolution of this issue may open the way for more positive parent-professional interactions.

Ms. B attributes her problems in participation to this negative climate. Although anxious to utilize the program again at Kendall, she states that she would first, "establish a climate of mutual trust between parent and school."

When Ms. B describes her low and vanishing number of participants to school/community climate, she raises important questions. Table A presents the data which also raises those questions. If parent participation drops off, isn't that indicative of weaknesses in the visuals or manual? Isn't the drop in n important data in assessing the value of the program. Yes, the low and varying n is important data; no, the information provided does not necessarily suggest weaknesses in this program, but rather the generic weakness of materials which are designed to be utilized by many, many others in many, many situations. The NRMCD program is not teacher-proof or facilitator-proof or school-proof. As has been stated before, the program is not important for itself, but rather for what it stimulates in the groups that view it. In
its openness to individual and group concerns, it is also open
to facilitator or situational weaknesses. The program developer
made a conscious decision to enhance and increase the openness
of the program and recognized the possible problems relating to this
openness. The anticipated weakness might be compensated for
if facilitators were carefully screened. The following questions
should be considered by administrators or potential facilitators
before commencing the NRMCD program:

1. Do parents like to talk to this person?

2. Does this person spend noticeable amounts of time
in talking with and planning with parents?

3. Does this person like to work with groups?

4. Would this person choose to invest time in planning
and implementing the NRMCD program?

5. Is this person familiar with operant procedures?

6. Has this person read the facilitator's manual and
seen the visuals and responded positively?

7. Is this the best person to perform this function?

8. Should a parent implement this program? Should it
be a parent-educator team?

9. What kind of teacher-parent interrelationships can be
developed out of this program?

This selection procedure should aid in assuring the appointment
of a facilitator who is most likely to have something to offer the
parents and thus, able to maintain parent participation. This
procedure would have aided in selecting facilitators for the evaluation who would have been able to maintain their initial n. The key to increased and consistent parent participation is the selection of the right individual as facilitator. That individual will then modify and personalize the NRMCD program.

The factorial design was based on three different exposures to the NRMCD program in the four test sites. These three exposures were (1) the NRMCD program, pre/post-test and checklist at weekly parent sessions; (2) the pre/post-test and checklist instruments through the mails; and (3) the pre/post-test instrument through the mails. A major problem in the implementation of the design was the effort involved in participating in the Communication Behaviors Checklisting. Parents who met weekly with other parents were reinforced by their peers for checklisting efforts. Mail-in parents were not; and the failure of any of these parents to complete the checklisting obligation reflected that lack of reinforcement for considerable efforts. Although understandable, this problem still forced the researcher to rely on data from M₁ and M₃ parents and to only surmise about the impact of the checklist on the groups.

M₂ participation and an increase in M₃ participation might have been brought about by additional facilitator contact with mail-in participants. If facilitators had called or written parents and extended personal and school approval and encouragement
for parent participation, original design plans could have been carried out. Another strategy which might have increased $M_2$ and pre and post-test participation, and thus would have increased the n in all the cells, would have been to indicate that all parents should identify themselves by only the last five digits of their Social Security numbers. Reports from facilitators and parents indicated that parents were reticent about providing entire numbers.

If the n had been larger and if the n in the different groups had not varied so much, and if the pre/post instrument had not aroused negative response, and if parents who sent in pretests had also sent in post-tests, and if and if and if ..., then the internal and external validity of this evaluation would not be open to question. Unfortunately it is. Still the outcome of the exposure of hearing parents of deaf children to the NRMCD materials and procedures provided data for necessary changes and additions to the program. Those changes are reported in the next section of this chapter.
Improvements in the NRMCD Program. Results reported in Chapter III aid in responding to purpose (10):

to alter the NRMCD program to facilitate communication between hearing parents and their deaf children so that it reflects the data gathered during this field testing. The following list of alterations is based on the results gathered in response to this purpose: (Appendix V includes additions and alterations.)

1. In order to increase the likelihood of selecting effective facilitators, a list of criteria (in the form of questions) has been included in the facilitator's manual.

2. In order to assure that parents and teachers are having increased and enhanced communication, suggestions for NRMCD program and classroom curricula tie-ins have been included in the facilitator's manual.

3. Based on mandates from parents and educators of the deaf, the facilitator's manual now includes a strong suggestion that the program be used to familiarize teachers-in-training with the concerns of the parents of their deaf (or handicapped, in general.)

4. Based on mandates from parents and educators of the deaf, the manual now urges administration and facilitators to utilize the program with grandparent and sibling groups, and to make special arrangements so that both parents can attend.

5. Checklisting, a procedure which received surprisingly positive response and which was only a tentative part of the
program, has now been included as one of the major procedures in the program.

6. After parents and educators at the field test sites had viewed the program, they saw immediate uses of the materials with their adolescents. A section which will aid educators in utilizing the program with parent and/or parent-adolescent groups has been added to the manual.

7. The assumption that facilitators would be able to apply behavioral principles within this parent education program was unfounded. In order to help facilitators learn about these procedures so that they can utilize them when appropriate, a section on operant resources has been added to the facilitator's manual.

8. Facilitators felt that the facilitator's manual was "more than adequate". There were, however, some suggestions that more visuals relating to 7 - 14 year old deaf children be added and that these added visuals should focus on the problems of the day school child and his/her parents. The following visuals have been added to the program:* 

a. A 10 year old deaf girl answers the door with her father. Cousin Jack stands there. The girl is delighted and surprised at the sight of him. She says "Oh look at Jack's pimples."

b. A deaf 7 year old boy and his parents are at the

*Copies of the visuals are included in Appendix V.
doctor's office. She comes to greet them and the boy points to her stomach and says, "Fat lady!"

c. A mother and her daughter are in a supermarket. The child has opened up some unopened chips and is munching on them. The mother sees and starts to grab at the daughter. The daughter steps back, away from the mother, and is about to fell a pyramid of Crush Me toilet paper rolls.

d. A mother, her daughter and the Avon lady are gathered around a coffee table. While the Avon lady and the mother try to talk, the daughter tries to get into the conversation.

9. Based on the analysis of group interactions while utilizing the program, the manual suggests a maximum participating number of 12. This would necessitate an initial n of 15, considering the likely attrition rate.

10. Programmatic weaknesses observed in the process of recording for the Interaction Descriptor were included in Chapter III, purpose (6). A listing of these weaknesses, perhaps as a caveat, and in close juxtaposition with the new section in the facilitator's manual, Teaching Parents to Teach Children, may effect the avoidance of those observed weaknesses.

   Suggestions for strengthening the study and the program stimulate thought about tangential and additional study and projects. The next section of this chapter explores these possibilities.
Implications for Additional Research and Program Development.

In the process of developing and field testing the NRMCD program, possibilities for additional research and program development presented themselves. Some research possibilities are suggested in the list that follows:

1. The parent education which focussed on communication behavior change by parents with their deaf children was based on parent-parent and parent-facilitator interactions. It is possible that concentrating on communication behavior change in homes was a premature step. Instead, a study focussing on the effectiveness of the NRMCD program as stimulus materials in groups of parents of the deaf might be undertaken. Amount and type of interaction would be the dependent variables. The program would be implemented in various sites with simultaneously meeting control groups at those same sites. These control parents would have no exposure to the program but would be observed in their interactions. Interactions in experimental and control groups would then be tested for significant differences.

2. Less formal, but also important, investigations into parent participation need to be made. Do more parents of children in oral or total setting participate in parent education? What do they perceive as their major needs? What kinds of programs stir parent interest and encourage participation?

3. The NRMCD materials and procedures can be used with
a chronological or thematic approach. This formative evaluation and the facilitator's manual rely upon the chronological approach; however, the manual does provide ideas for thematic utilization, e.g., treatment of sibling issues or concerns of social relationships. A study to investigate the impact of these two approaches might be made.

4. Parents offered varying opinions on the optimal composition of the parent groups. Some wanted groups with parents of children of varying ages, including parents of teenagers. Others felt that mixed age groupings were distracting. Measurement of the relative effect of the program in these two possible groups might be made.

5. Deaf children can be educated in day or residential settings. This formative evaluation tested the program with parents of children in day school sites. It would be of obvious importance to implement and test the program with parents of residential children, and then to compare behavior change in day and residential settings.

6. That which actually goes on in homes with deaf children needs further observation and analysis, especially with potential correlation to the academic and social competence of the deaf child. Actual home observation would provide the data for this eventual correlational study; competence ratings would come from a panel of educators and counselors of the deaf children.

7. Home observation studies of parent-child communication
and the commitment of the family to one or the other communication methodology must be undertaken.

8. A final research direction might be to investigate the effects of the NRMCD program over time. Such a longitudinal study would analyze behavior change at 3 or 6 month increments to determine whether or not the program has any impact as time passes.

Some program development possibilities are suggested in the list that follows:

1. Approximately 20% of the visuals treat issues of concern to parents of deaf adolescents. These visuals have been seized upon by schools for the deaf as potential language stimulators. They are also being used in combined groups of hearing parents and deaf adolescents. This particular use is described and detailed in an addition to the facilitator's manual.

   Further project development in this area should take place. Additional open-ended visuals elaborating upon the social, career and personal development of the deaf adolescent should be developed. A written accompaniment for these stimulus materials should be undertaken. Ideally these materials should become a part of the adolescents' in-school curriculum.

2. Siblings of deaf children could play a very large part in the enrichment of the deaf child's environment. They are also significant factors in the interaction of the deaf
child and the hearing parents. A program which focuses upon the likely sibling-deaf child interaction situations and which presents suggestions for maximization of communication potential in these situations should be undertaken. A similar focus on grandparent-deaf child interaction might also be worthy of development.

3. There is an obvious and recognized need for the development of mediated materials to teach parents to sign and fingerspell. In order to encourage more parents to learn this method of communication with their deaf children, it would be useful to design and film a dramatized treatment of the convincing data which urges parents to utilize total communication. This introductory piece could then be followed up with a mediated (or non-mediated) sign language course.

4. Whenever the NRMCD program has been presented to special educators, they have urged the development of similar programs which deal with their particular area of exceptionality or which approach the problem non-categorically. This encouragement has been acted upon. In concert with the Capital Region Education Council of Hartford, Connecticut, the developer of the NRMCD program has submitted a proposal for ESEA, Title III funds to address the concerns of parents of children with other exceptionalities.
Conclusion. At the time of its inception, the NRMCD program responded to a need which had received little institutional or programmatic attention. The need was the problem of communication between hearing parents and their deaf children. It is poignantly expressed in the words of this parent who returned a totally blank pretest.

My child name is Frank

Really, I want to tell you that I can't answer this, because Pedro doesn't understand me and I don't understand him. We try to talk to him but all what he do is laugh and run away from us. At home he think that everything is for him. The others can't have anything. If I want that he understand me, I got to hit him. Some times he make me fill really mad, and get so nervous.

Either I don't understand how to answer his conversation. As soon he get home he take the hearing aid away from him and he don't want to use it.

And if he want something that he should have. If we don't give it to him all what he do is crying until he gets it.

I'm his mother and really I tell you that I don't understand him by myself.

He is so terrible at home, and in everywhere that we go with him. (M3OP Parent)

The NRMCD program relies on a simple, inexpensive medium, the transparency, utilized on an omnipresent piece of hardware, the overhead projector. Any parent or teacher can project the visuals; the facilitator's manual can direct some of those parents or teachers to an effective utilization of the program.

Through this formative evaluation, an examination of the program and improvements in it were undertaken. At the same
time, some data on the concerns of parents of the deaf and some differing emphases in oral and total parents were unearthed.

This study has looked at a program, its impact, some possible improvements in its form and content, and the nature and concerns of the intended audience for that program. The results have been reported in the first three chapters. They have been further discussed and elaborated upon in this chapter.

The program has been designed and reworked for implementation with any and all parents of the deaf. It has been tested and amended based on evaluation in "varied and usual" sites, schools like any other educational settings for the deaf across the country. Now, in the spring of 1974, the amended NRMCD program will be disseminated to the schools, clinics, hospitals and institutions which request it. Because of its open-ended nature, they will adapt it to their unique perspectives and concerns.
Selected Bibliography*


*The last section of Appendix II, the facilitator's manual, offers a semi-annotated Bibliography and Resource Listing compiled by this author. This Selected Bibliography presents sources relied on in the writing of this document. For additional sources in parent/deaf education, please refer to the facilitator's manual.


Correspondence Course for Parents of Little Deaf Children. The John Tracy Clinic, 806 West Adams Blvd., Los Angeles, California 90007.


Appendix I:

Selections From the NRMCD Program
Oh, your daughter is wearing a hearing aid. How much can she hear?
a mediated program designed to facilitate communication between parents and their deaf children

NORTHEAST REGIONAL MEDIA CENTER FOR THE DEAF
I. Description of the Visual:

There are three parts to this transparency. Part I: A deaf infant is reaching out to pull a pan of boiling food down on him. The mother is shouting out to the child. Part II: A deaf girl is chasing after her puppy. The puppy runs into the street and the girl runs after the puppy. A truck is coming towards them. The mother is shouting out to the child. Part III: A deaf youngster is skating towards a group of hockey players. The father sees a hole in the ice and shouts out to warn his child.

II. Suggested Questions and Activities:

Questions: What is going on in each of the sections of this visual? What is the common problem? How does the parent feel? Have you been in any similar situations? What happened? What can a parent do to diminish the likelihood of these dangerous situations arising? What have you done to diminish the likelihood of these dangerous situations arising?

Activities: Make a list of likely danger situations for deaf children of different ages, e.g., pots on stoves, tops of stairs, sharp pointed objects for little ones; matches, streets, traffic for somewhat older children. Design visual warning and construction messages for these young children. Use these visual messages with young children until they effectively communicate with the child. List home dangers which can be eliminated and make lists available to other parents.
III. Subjects for Discussion and Parental Reactions:

Focus discussion on these general areas:

(1) Possible situations which a young child, especially a deaf child would find dangerous.

(2) Communication between parent and child prior to the dangerous situation in order to educate the child to avoid getting into the situation.

(3) Parental concerns about the child's welfare: protection and over protection.

(4) Caution in the home and community.

IV. Parent Behaviors:

(1) Parents discuss the child's safety and methods to assure it.

(2) Parents seek out help in finding the best way to arrange their home and immediate environment to protect the child.

(3) Parents discuss special dangers caused by the child's deafness and how to alleviate these dangers.

(4) Parents tell the child about danger spots in home and community.

(5) Parents tell the child how to avoid dangerous situations by setting down clearly defined and explained rules.

(6) Parents communicate these danger spots and protective rules in various ways: through talking, through drawing, through signing through pantomiming possible situations.

(7) Parents set up a situation to make sure that the child understands and follows protective limits.
I. Description of the Visual

A mother and her deaf daughter are in a bus. A young man leans forward and questions the mother.

II. Suggested Questions and Activities:

Questions: What does the mother say? What should the mother say? Is the boy being rude? Have you been in a similar situation? What did you say? What was the questioner's reaction? What should you say to your child in this situation?

III. Subjects for Discussion and Parent Reaction:

Focus discussion on these general areas:

(1) The public and deafness.

(2) Information-sharing about deafness.

(3) Communication with the young deaf child about people's interest in and reaction to the hearing aid and deafness in general.

Most parents have seen this as an opportunity to educate the public about deafness. Ask the parents who want to do this to say exactly what information they would share with people on a bus. A different and interesting reaction came from a group of deaf adolescents who reviewed these visuals. "Oh, that piggy man. He's too nosey!" They were much more disturbed at the public notice given the hearing aid than their parents.

IV. Parent Behaviors:

(1) The parent anticipates this question and thinks about a reasonable
and informative response. She/He tells questioners that hearing aids are unlike glasses, and that they do not correct hearing. She/He gives him some idea of the sounds that her/his child can hear and explains that it is harder for her/his child to hear the consonant than the vowel sounds.

(2) The parents purchase a copy of the record: "Getting Through"* to lend to friends and acquaintances (and to suggest to people on busses) to give them precise information about hearing loss.

(3) The parent tells the child that someone has asked about her hearing aid and about being deaf. She shows the child that she is not embarrassed about the question by answering it directly. She talks about the hearing aid and deafness in front of the child.

(4) If the child is mature and able to communicate, the parent encourages the child to respond to the question.

I. Description of the Visual

A mother is celebrating her hearing son's good grades with him. Her deaf son is sitting apart from the celebration and fiddling with silverware.

II. Suggested Questions and Activities:

Questions: What is going on here? What are the mother and hearing son saying to each other? How does the deaf son feel? Does he say anything or in any way indicate that he feels left out. Have you had a similar situation in your family? What did you do in this situation? How did your deaf child indicate that he/she felt left out? What did your hearing child do?

Activities: Ask teachers and other parents for suggestions for activities through which hearing siblings can work with their deaf siblings. List these activities and make them available to parents and hearing children.

III. Subjects for Discussion and Parent Reactions:

Focus discussion on these general areas:

(1) The relationship between hearing and deaf siblings.

(2) The academic success of the hearing child in relation to the deaf child's academic work.

(3) The parent's encouragement of both her deaf and her hearing children. Parents have talked of the ease they have in showing their pleasure with their hearing child's success and the difficulty in making a similar communication with their deaf child. Often they avoid this praising because of the difficulty in communication.
Emphasize the importance of this praise and the possibility of relying on physical demonstration as well as verbal demonstration of it.

IV. Parent Behaviors:

1. The parent observes her children to identify those abilities and actions which she thinks are praiseworthy.

2. The parent praises (through signing, talking, writing, cooking, hugging, kissing, etc.) her children for these positive actions.

3. The parent is conscious of the danger in always praising one child and neglecting to praise the other.

4. The parent explains the hearing child's successful behavior to the deaf child and vice versa.
I. Description of the Visual

A deaf youngster observes a fight between his mother and father.

II. Suggested Questions and Activities:

Questions: What is happening here? What might the son think? What does the son do? What should these parents do? What have you done in similar situations? What effect do you think your child's deafness has had on your relationship with your spouse?

III. Subjects for Discussion and Parent Behavior:

Focus discussion on these general areas:

(1) Altercations between parents and the deaf child's observation of them.

(2) Divorce and the deaf child.

(3) Communication with the child about the relationship between mother and father.

(4) The effects of a handicapped child on a marriage.

This transparency has touched many of the parents who have viewed it. Some speak intimately about the problems in their marriage, those problems exacerbated by the deafness and those having no relation to it. Other parents are more reticent. The kind of discussion initiated by this visual will be greatly influenced by the kind of group atmosphere established by earlier discussions. It is important to tie this discussion of parent communication (or lack of it) to the discussion of parent-child communication. Emphasize that deaf children will perceive hostility, even if they do not observe the actual verbal exchanges.
IV. Parent Behaviors:

(1) The parents discuss the likelihood of their hurried and sometimes emotional interchanges being misunderstood by the deaf child.

(2) The parents try to avoid rapid and hostile exchanges in front of the deaf child.

(3) The parents take time to explain to the child that they are not angry at the child and that she/he is not directly involved in the dispute.

(4) The parents ask the deaf child to question them about the argument she/he has observed.

(5) The parents answer the questions asked by the child which they judge to be appropriate.
I. Description of the Visual

A family is gathered around the dinner table. They are happily talking and laughing with each other. The deaf son is tapping his sister's shoulder.

II. Suggested Questions and Activities:

Questions: What is the problem here? What is the deaf son feeling? What does he say or do? What could his parents or siblings do? Does this happen at your dinner table? How do you involve your deaf child? How much does your deaf child contribute to dinner conversation?

III. Subjects for Discussion and Parent Reaction:

Focus discussion on these general areas:

(1) Problems that the deaf child has in communicating with the family.
(2) Problems that the family has in communicating with the deaf child.
(3) Methods for reducing these problems in communication.

Because this situation is so specific, parents have often expressed strong identification and sadness. This happens at their dinner tables. Suggest that families with a deaf child not sit in the same seats for dinner. Move the members around so that different individuals are responsible and praised for doing the necessary repeating or interpreting. Often parents give this communication responsibility to the hearing siblings. Parents have said that they are responsible for making and serving the food. Thus it is only the hearing siblings who are free to interpret. If the food making and serving respon-
sibility is shared, then the communication effort will also be shared.

IV. Parent Behaviors:

(1) Parents discuss the difficulty in rapid, emotional communication with their deaf child.

(2) Parents discuss the deaf child's feelings about seeing communication going on all around her/him at a place like the dinner table.

(3) Parents discuss the importance of including the deaf child with the hearing children and plan for a rotating individual to take responsibility for interpreting or repeating.

(4) Parents draw, sign or talk to the child about what is going on at the dinner table.

(5) Parents ask the deaf child's opinion during dinner conversation.

(6) Parents encourage the hearing siblings to ask the deaf child's opinion.

(7) Parents ask the deaf child to relate a story or incident in her/his day.
I. Description of the Visual

A mother, her daughter and her daughter's friend are shopping in a local department store. Two salespersons observe the girls and the mother as they sign to each other. They comment on the signing.

II. Suggested Questions and Activities:

Question: What is happening here? What are the salespersons saying to each other? Do you think many people comment on sign language? Do most of the people making comments say negative, positive or neutral things about sign language? If the mother notices the whispering, should she say anything?

III. Subjects for Discussion and Parent Reactions:

Focus discussion on these general areas:

(1) The hearing person's initial reaction to sign language.

(2) The use of sign language by deaf children and their hearing parents as an effective means of communication.

(3) The parent's interaction with the public about sign language.

Parents have varied in their interpretation of this whispering. These parents' feelings about how others view deafness and signing will be indicated by this interpretation. Some thought the salespersons were saying, "Look at those people moving their hands. What's the matter with them? Can't they talk?" and others thought they were saying, "Wow, isn't that interesting. I wouldn't mind being able to do that."
IV. Parent Behaviors:

(1) The parents discuss and decide upon the method of communication which will enable them to communicate most effectively with their adolescent child.

(2) The parents ask their deaf child if the child wants them to learn to sign.

(3) If they feel it will help communication and if the child encourages them, the parents attend signing classes.

(4) The parents sign with their deaf child and their deaf child's friends.

(5) The parents encourage siblings to learn to sign.

(6) The parents and the child sign in public.

(7) If the parent feels that observers are curious, the parent explains the method of communication that they are using or she asks her deaf child to explain.
I. Description of the Visual

Two attractive teenage girls are walking into a soda shop. Two deaf teenage boys observe the girls and sign about them.

II. Suggested Questions and Activities:

Questions: What is happening here? What are the boys telling each other? Are the girls hearing or deaf? How do the girls respond? What do the boys do? Are deaf boys likely to have social success with hearing girls?

Would you prefer your deaf child to eventually marry a hearing person? A deaf person? Does your deaf child have a preference in this area? Have you talked about dating and marrying hearing people with your deaf adolescent?

III. Subjects for Discussion and Parent Reaction:

Focus discussion on these general areas:

(1) The relationship between deaf and hearing adolescents.

(2) Parent expectations for interaction between deaf and hearing adolescents.

(3) Dating and the deaf adolescent.

(4) The deaf adolescent's social attitudes and behaviors towards his/her deaf and hearing peers.

Most parents have said, "I don't care who my child marries, as long as he/she loves the person." Still it is important for parents to see that their feelings about deafness may be shown by encouragement or lack of encouragement of social interaction with hearing peers. Being very enthusiastic about a date with a hearing person might be
interacted as wishing and hoping that the deaf child could succeed by marrying a hearing person. Being very negative about a date with a hearing person might be interpreted as thinking that the deaf child isn't as good as or can't make it in a social situation with a hearing person. Deaf adolescents might be sensitive to these kinds of interpretations.

IV. Parent Behaviors:

(1) The parents discuss their attitudes about dating and share these attitudes with their child.

(2) The parent discusses dating and friendship with the deaf adolescent.

(3) The parents and the adolescent set up expectations for the child's social behaviors (e.g., curfew, allowance, off-limit places, parties)

(4) The parents ask the deaf child about his/her social expectations and tell (in varying ways) the deaf child that he/she is capable of accomplishing these expectations.
I. Description of the Visual

A mother and her sixteen year old son are on their way home from a store. They observe a streetcleaner with a hearing aid.

II. Suggested Questions and Activities:

Questions: What is going on here? What does the mother think? What does the son think? Do they say or sign anything to each other? Should they? What would you do in this situation? What have you said to your deaf child about about his/her career plans? Have you discussed vocational possibilities with your child's teachers?

Activities: Meet with your local deaf adult organization and discuss job possibilities for deaf people. Invite the vocational counsellor from the local school for the deaf to a meeting.

III. Subjects for Discussion and Parent Reaction:

Focus discussion on these general areas:

(1) Communication between the parent and the deaf child about the child's career plans.

(2) Forming realistic expectation for your deaf child.

(3) The societal value and prestige attached to various jobs and professions. Even parents of pre-school children wanted to talk about this. "What can my child do when he/she grows up?" "Will he/she be able to get a good job?" "Can he/she still become a doctor? a teacher? a physicist?" These are vital concerns for
parents of deaf children of all ages. Invite deaf adults who hold interesting jobs and who have strong imaginations to visit the parent group.

IV. Parent Behaviors:

(1) The parents talk to each other about what their child does well and likes to do.
(2) The parents talk to deaf adults and parents of deaf children about the jobs which do not depend on hearing.
(3) Parents talk to their child about his/her likes and abilities and what he/she sees in his/her future.
(4) Parents discuss their child and his/her abilities with the teachers and administration at the child's school.
(5) Parents discuss their work with the child and answer questions about it.
(6) Parents take the child to observe varying jobs which are related to his/her interests and abilities,
Appendix II:

Instrumentation
We are interested in knowing more about the parents who are working with us on this parent education program. By answering the following questions, you will give us a clearer picture of the many parents who are involved in this program. Please tell us about yourself by completing the following items:

1. How many children are in your family?________
2. What are their ages?________________________
3. How many of these children are deaf?________
4. How old is/are the deaf child/children?_______
5. Do any of the children have handicaps other than deafness?________
   If yes, what are their handicaps?

6. Are there any residents in your home who are not members of the immediate family?
   If yes, please state number and relationship.

7. Is any language other than English spoken in your home?________

8. Do you live in an apartment?________ or a private home?________
   other________________

9. Do both you and your spouse hold jobs outside the home?________
   Please describe your work.
   wife________________
   husband________________

10. Please check the space which indicates you and your spouse's combined income:
    under $5,000________
    $10,000-$15,000_____ 20,000+_______
    5,000-10,000_____ 15,000-20,000_____

11. What was your last completed level or year of schooling? (e.g. eighth grade, high school, college, graduate, etc.)________

12. Are you able to communicate with your deaf child using sign language and fingerspelling?________
**TABLE 7: INSTRUMENT**

(usize 7: Communication Materials)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Always</th>
<th>Usually</th>
<th>Sometimes</th>
<th>Never</th>
<th>Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you share information about deafness with your spouse?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Do you discuss plans for steps in the child's education with your</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>spouse?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Do you give the child's grandparents information about education of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the deaf, about deafness and about future expectations for the deaf</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>child?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Do you suggest ways that the grandparents can offer the child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>additional learning experiences?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Do you talk to their friends about the child's deafness?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Do you suggest ways that your friends can help you and your deaf</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>child?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Do you talk with your friends about the way they are reacting and the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>way you are reacting to them?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Do you and/or your spouse look for books, articles and pamphlets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>about deafness?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Do you ask professionals for information about deafness?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Do you communicate information derived from professionals or reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with your family and friends?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Do you ask your child's teacher about your child's activities and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>progress?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Do you ask your child about your child's activities and progress?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
13. Do you include your child in visits to potential schools?
14. Do you discuss methods to insure physical safety for the deaf child?
15. Do you arrange your house and immediate environment to protect the child?
16. Do you tell your child about danger spots in the home and community?
17. Do you tell the child how to avoid dangerous situations through talking, drawing, pantomiming, signing or any combination of channels for communication?
18. Do you set up a test situation to make sure that the child understands and follows protective limits?
19. Do you talk to your friends about being the parent of a deaf child?
20. Do you discuss child management (and special problems in the management of a deaf child with your friends?
21. Do you communicate to your child your pleasure or displeasure with the way he/she is playing with another child?
22. Do you ask professionals for information about the different methods of communication in schools for the deaf?
23. Do you ask parents of other deaf children for information about the different methods of communication in schools for the deaf?
24. Do you ask deaf adolescents and deaf adults for information about the different methods of communication in schools for the deaf?
25. Do you visit schools which use different methods and observe the educational process?
26. Do you evaluate your child and decide which method of communication will best serve that child?
27. Do you evaluate your child and decide which method of communication will best serve that child?
28. Do you ignore your child's tantrum behavior until it begins to lessen?

29. To communicate with your child, do you put yourself at eye level with the child?

30. Do you reward the child's behavior that you like and want by immediately following it with something that the child enjoys?

31. Do you communicate your approval for good behavior through physical contact (like hugging and kissing)?

32. Do you talk about and/or sign about the objects of interest in the child's environment?

33. When strangers in public places ask questions related to the child's deafness, do you give them information about the child's disability?

34. Do you discuss the way your child gets along with community children with your spouse?

35. Do you invite the community children into your home?

36. Do you encourage your child to take part in community activities with other children?

37. Do you tell your deaf child that you want him/her to play with the local children?

38. Do you discuss discipline plans with your spouse and decide on the most beneficial method for your child?

39. Do you read about and then apply child management techniques?

40. Do you make your expectations for bedtime clear to your child by drawing, signing, talking and any other combination of methods of communication?

41. Do you use an appropriately behaving child as a model for your deaf child?
42. Do you and your spouse discuss the television programming which your child likes and decide if you wish your child to view it?

43. Do you communicate to your child by talking, signing, writing or other techniques your negative or positive feelings about specific programs?

44. Do you watch TV with your child?

45. Do you interpret the dialogue and action for your child?

46. Do you follow up the TV programming by pointing out objects and ideas from the program which are related to the child's environment?

47. When the family is watching the TV news, do you and/or his siblings explain what is happening to the deaf child?

48. Do you and your spouse discuss, plan and do activities which are alternative to TV?

49. Do you investigate popular children's games and the language associated with them and then familiarize your child with this language?

50. Do you encourage your child to play with hearing peers?

51. Do you encourage your child to communicate with hearing peers?

52. If questioned, do you give specific information to your child's friends about your child's limitations and abilities?

53. Do you anticipate trips to the store and give your child specific instructions through pictures, talking and/or signing about acceptable behavior in the store?

54. If a storekeeper complains about the child's behavior, do you explain that the child cannot hear and how best to communicate with the child?

55. If a storekeeper questions you about your child, do you give him specific information about deafness?
56. Do you correct your child's behavior while the child is in the public place in which he has misbehaved?

57. Do you discuss your child's ability to take care of himself with your spouse?

58. Do you and your spouse discuss, plan and implement how best to develop your child's independence?

59. Do you talk to doctors, school personnel and parents of other deaf children about realistic expectations concerning independence for your child?

60. After discussion of your child's ability to take care of himself, do you choose appropriate activities for the child?

61. Do you communicate the activities which you feel are appropriate to your child?

62. Do you (via pictures, talking and/or signing) make suggestions for safe play behaviors?

63. Do you provide experiences which encourage discussion about the birth process?

64. Do you talk with other parents about the way they provide sex education to the child?

65. Do you talk to school personnel about their methods of sex education for deaf children?

66. Do you anticipate questions from strangers about your child's deafness and do you plan an informative and honest response to the questions?

67. When questioned about your child's hearing in your child's presence, do you share the question and the response to the question with the child?
69. If the child is mature and able to communicate, do you encourage the child to respond to a stranger's questions about deafness?

70. Does your deaf child help you with the new baby?

71. Do you observe your child to identify those abilities and actions which you think are praiseworthy?

72. Do you praise (through signing, writing, talking, hugging, etc.) your child for the positive actions listed in #71?

73. Do you tell your deaf child about his/her deaf sibling's successful activities?

74. Do you tell your hearing child about his/her deaf sibling's successful activities?

75. Do you discuss the likelihood that your hurried and sometimes emotional interchanges with your spouse might be misunderstood by your deaf child?

76. Do you try to avoid rapid and hostile exchanges with your spouse in front of your child?

77. Do you explain to your deaf child that she/he is not directly involved in the husband/wife dispute?

78. Do you answer your child's questions about a marital dispute, if you judge the questions to be appropriate?

79. Do you take your child to observe various sports?

80. Do you explain the sports to the child?

81. Do you ask the child if the child is interested in participating in a sport?

82. Do you anticipate communication problems which might occur while participating in a sport and prepare your solutions for them?

83. Do you explain deafness and your child's limitations and abilities with the coach?
84. Do you suggest ways of effectively communicating with the deaf child to the coach?

85. Do you attend games in which your child participates and do you discuss this activity with your child?

86. Do you praise your deaf and hearing children when they work and play together?

87. Do you encourage your hearing child to provide language learning opportunities for his deaf sibling?

88. Do you include your hearing child in your special lessons with your deaf child?

89. Do you ask the deaf child about her/his feelings concerning dinner table communication for your deaf child?

90. Do you ask for the deaf child's opinions and reactions during family conversation?

91. Do you ask the deaf child to relate an incident in her/his day?

92. Do you encourage your child to talk about her/his feelings about being deaf?

93. Do you find out about community organizations and how your child can join them?

94. Do you answer your child's questions about religion?

95. Do you discuss your child's religious education with your spouse?

96. Do you successfully communicate information about your faith to your child?

97. Do you include your deaf child in the family's religious activities?
98. Do you discuss religious education with school personnel?
99. Do you visit your child's school?
100. Do you spend time at the school with your child?
101. Do you physically express your affection to your child?
102. Do you encourage your deaf child to physically express affection to your other children?
103. Do you encourage your deaf child to physically express affection towards you?
104. Do you physically express your affection towards your spouse in front of your deaf child?
105. Do you involve your child in decisions and preparations for family social gatherings?
106. Do you tell your child about the people who are invited to the social gathering?
107. Do you suggest effective methods of communication with your deaf child to your guests?
108. Do you ask your child about his/her reaction to the social gathering?
109. In the child's presence, do you tell other people about the child's interests and activities?
110. Do you encourage the child to share information about his/her interests and activities with other people?
111. When the child reaches adolescence, do you discuss learning sign language with your spouse?
112. Do you ask your deaf child if he/she wants you to learn sign?
113. Do you and your child sign in public?

114. If observers of public signing ask questions about this method of communication, do you or your deaf child answer those questions?

115. When there is a family telephone conversation, do you involve your child in that communication?

116. Do you encourage your child to speak on the phone if your child would be intelligible?

117. Do you explain the use of the telephone to your deaf child and how he/she could use it?

118. Do you discuss handicaps other than deafness with your child?

119. Do you talk to your child about the impact of deafness on the child's social life?

120. Do you ask your deaf child about how he/she feels about dating hearing people?

121. Do you encourage your child to ask questions about male/female relationships?

122. Do you share your attitudes about dating with your child?

123. Do you set up expectations for the child's social behaviors? (curfew, allowance, auto privileges)

124. Do you invite your adolescent's friends to your house?

125. Do you discuss social issues (like war, VD, women's rights) with your child?

126. Do you suggest additional sources for information about social issues to your deaf adolescent?

127. Do you discuss your adolescent's abilities and interests with your spouse?
128. Do you talk to deaf adults and parents of deaf children about jobs which do not depend on hearing?

129. Do you discuss your work with your child?

130. Do you take the child to observe jobs which are related to the child's interests and abilities?

131. Do you talk and/or sign about what your child's graduation will mean to the child?

132. Do you talk and/or sign about what your child's graduation will mean to you?

133. Do you plan with the child what he will do after graduation?
1. Do you honestly tell your physician(s) how you feel about the way he/she handles your concerns about deafness?

2. Do you make suggestions to physician(s) for improved methods for dealing with the parents of handicapped children?

3. Can you answer questions about your child's deafness in front of the child without being embarrassed?

4. Prior to the birth of a new child, do you prepare the child for the mother's disappearance and eventual reappearance with the new child?

5. If you learn to sign, do you encourage your other children to learn?

6. Do you talk to deaf adults and parents of deaf children about jobs which do not depend on hearing?

7. Do you make arrangements or rely on the school to make arrangements for the deaf child to learn to drive?

8. Do you use pencil and paper and driving instruction manual illustrations to familiarize the deaf adolescent with driving regulations?

9. Do you communicate to your child that you expect the child to become a competent driver and to take some responsibility for family driving?

10. Do you arrange for your child to communicate with deaf graduates about their activities?
We are looking for information about communication between hearing parents and their deaf children.* We hope that this information will help us help you improve this communication.

There is no need to write your name on this form. Instead, fill in the information requested in the upper right hand corner of this page. This will insure your anonymity while allowing the evaluator to compare an anonymous individual's responses before and after this course.

Please read the following questions and then check the column which indicates your honest response to the question. If any of the questions do not seem to apply to you, check the column headed not applicable. Please choose the not applicable column as infrequently as possible.

Thank you for taking part in this project.

*The term "communication" as used in all of the questions means any possible means of communication, such as talking, signing, drawing pictures, pantomiming, etc.
## 1. Do you encourage your child to take part in community activities with other children?

## 2. Do you investigate popular children's games and the language associated with them and then familiarize your child with this language?

## 3. Do you encourage your child to play with hearing peers?

## 4. Do you encourage your child to communicate with hearing peers?

## 5. Do you provide experiences which encourage discussion about the birth process?

## 6. When questioned about your child's hearing in your child's presence, do you share the question and the response to the question with the child?
7. If the child is mature and able to communicate, do you encourage the child to respond to a stranger's questions about deafness?

8. Do you explain to your deaf child that she/he is not directly involved in a husband/wife dispute?

9. Do you answer your child's questions about a marital dispute, if you judge the questions to be appropriate?

10. Do you take your child to observe various sports?

11. Do you explain sports to the child?

12. Do you ask for the deaf child's opinions and reactions during family conversation?
13. Do you ask the deaf child to relate an incident in her/his day?

14. Do you encourage your child to talk about her/his feelings about being deaf?

15. Do you answer your child's questions about religion?

16. Do you include your deaf child in the family's religious activities?

17. Do you tell your child about the people who are invited to a family social gathering?

18. Do you ask your child about his/her reaction to a social gathering?
19. Do you ask your deaf child if he/she wants you to learn to sign?

20. When there is a family telephone conversation, do you involve your child in that communication?

21. Do you explain the use of the telephone to your deaf child and how he/she could use it?

22. Do you discuss handicaps other than deafness with your child?

23. Do you talk to your deaf child about how he/she feels about the impact of deafness on her/his social life? (e.g. how she/he feels about her/his friends; how her/his friends feel; what she/he can do to improve the social life.)

24. Do you ask your deaf child about how he/she feels about dating hearing people?
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25. Do you encourage your child to ask questions about male/female relationships?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Do you share your attitudes about dating with your child?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Do you discuss social issues (like war, VD, women's rights) with your child?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Do you discuss your work with your child?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Do you talk and/or sign about what your child's graduation will mean to you?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Do you talk with the child about what she/he will do after graduation?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>weekend</td>
<td>2nd weekend</td>
<td>3rd weekend</td>
<td>4th weekend</td>
<td>5th weekend</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
To the facilitator:

It is important that the facilitator of the parent-child communication materials administer the pre-test to the parent group at the beginning of the first of six sessions. Prior to administering the pre-test, please read and comply with these directions.

(1) Create a non-threatening environment by emphasizing that this pre-test is to provide us with information on many hearing parents and their deaf children—and not to find out about any one parent and that parent's child. Insure that we will maintain the privacy of their answers and that no one will make judgements about the correctness or incorrectness of their responses. At this point we are only interested in a count of the frequency of certain behaviors with their children.

(2) Encourage parents to feel comfortable circling a number in any range of the scale. We are concerned with an honest estimate of behaviors per week and do not prefer high or low numbers as response. Emphasize that parents should not feel hesitant about checking the less than 1 time/week box.

(3) Please read the cover sheet on the pre-test sheet to the parents. The directions and questions should be self-explanatory. If the parents have questions after your reading, answer these questions as clearly as possible and with as little elaboration as possible.

Thank you for administering this pre-test and adhering to these directions.

Allison Rossett
NRMCD
Thompson Hall
U. Mass.
Amherst, MA  01002
We are looking for information about communication between hearing parents and their deaf children. We hope that this information will help us help you improve this communication.

There is no need to write your name on this form. Instead, fill in the information requested in the upper right hand corner of this page. This will insure your privacy and still supply us with necessary information.

Please read the following questions and then check the number which indicates your honest estimation of the number of times/week that you do what the question asks. If any of the questions do not apply to you, check the column headed Not Applicable (N.A.). Please choose the Not Applicable column as infrequently as possible.

Thank you for taking part in this project.

*The term "communication" as used in all of the questions means any possible means of communication, such as talking, signing, drawing pictures, pantomiming, etc.
1. How many times/week do you provide experiences which encourage discussion about the birth process?

2. How many times/week do you encourage your child to communicate in this case means language (chants, prayers, and songs) from popular children's literature, language with hearing peers?

3. How many times/week do you encourage your child to play?

4. How many times/week do you encourage your child to participate in community activities with other children?

5. How many times/week do you provide experiences which encourage participating in activities such as sports, games, etc.?
6. If, during the course of a week, you are questioned about your child's hearing in your child's presence, do you tell the child about the question and your answer to the question?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. If your child is mature and able to communicate, how many times/week do you encourage your child to respond to a stranger's questions about deafness?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. How many times/week do you explain to your deaf child that she/he is not directly involved in a husband/wife dispute?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. How many times/week do you answer your child's questions about a marital dispute, if you judge the questions to be appropriate?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. How many times/week do you and your child observe various sports?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. How many times/week do you explain sports to your child?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. How many times/week do you ask for your deaf child's opinions and reactions during family conversation?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. How many times/week do you ask the deaf child to relate an incident in her/his day?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. How many times/week do you encourage your child to talk about her/his feelings about being deaf?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. How many times/week do you answer your child's questions about religion?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. How many times/week do you include your deaf child in the family's religious activities?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. How many times/week do you tell your child about the people who are invited to a family social gathering? (Social gatherings might be birthday parties, guests for dinner, picnics with neighbors, etc.)

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

213
18. How many times/week do you ask your child about his/her reaction to a social gathering?

19. How many times/week do you involve your deaf child in family telephone conversations?

20. How many times/week do you ask your deaf child if he/she wants you to learn to sign?

21. How many times/week do you explain the use of the telephone to your deaf child and how he/she might use it?

22. How many times/week do you discuss handicaps other than deafness with your child?

23. How many times/week do you communicate with your deaf child about dating?
24. How many times/week do you communicate with your deaf child about friends and friendships?

25. How many times/week do you make suggestions as to how your deaf child can improve his/her social relationships (dating and friendships)?

26. How many times/week do you ask your deaf child about how he/she feels about dating hearing people?

27. How many times/week do you indicate to your deaf child that he/she may ask questions about male/female relationships?

28. How many times/week do you discuss social issues (like war, VD, women's rights) with your child?

29. How many times/week do you discuss your work with your child?
30. How many times/week do you talk with your child about what she/he will do after graduation?
social security # __________________________

date __________________________

facilitator __________________________

Dear Parent:

Approximately six weeks have passed since you filled out a questionnaire just like this one. Once again, we are trying to measure your communication with your hearing impaired child. In order for us to do this, please respond to the attached questions. Your prompt and honest responses will help us develop a program for parents of deaf children.

Please read the following questions and then check the number which indicates your honest guess at the number of times/week that you do what the question asks. If any of the question do not apply to you, check the column headed Not Applicable (N.A.). Please choose the Not Applicable column as infrequently as possible.

There is no need to write your name on this form. Instead, fill in the information requested in the upper right hand corner of this page. This will insure your privacy and still supply us with necessary information. If you have received this questionnaire in the mail, please return it promptly in the enclosed manilla envelope.

Thank you so much for participating in this project.

Sincerely,

Allison Rossett
Graduate Assistant
1. How many times/week do you discuss social issues (like war, VD, women's rights) with your child?

2. How many times/week do you encourage your child to play with hearing peers?

3. If your child is mature and able to communicate, how many times/week do you encourage your child to respond to a stranger's questions about deafness or deafness-related concerns like the hearing aid or special schooling?

4. If, during the course of a week, you are questioned about your child's hearing or your child's hearing aid or special schooling in your child's presence, do you tell the child about the question and your answer to the question?

5. How many times/week do you talk with your child about what she/he will do after graduation?

*This question is designed for parents of hearing impaired children of all ages.
6. How many times/week do you encourage your child to take part in community activities with other children? (e.g., scouts, little league, block parties, etc.)

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N. A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. How many times/week do you include your deaf child in the family's religious activities?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N. A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. How many times/week do you communicate with your deaf child about dating (or about getting along with people of the opposite sex?)

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N. A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. How many times/week do you encourage your child to talk about her/his feelings about being deaf?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N. A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. How many times/week do you ask your deaf child if he/she wants you to learn to sign? (If your child is being orally educated, how many times/week do you ask your child if he/she is able to understand what you have said?)

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N. A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. How many times/week do you explain to your deaf child that she/he is not directly involved in a husband/wife dispute?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N. A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. How many times/week do you ask the deaf child to relate an incident in her/his day?  

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. How many times/week do you familiarize your child with the language (chants, rhymes and songs) from popular children's games? (e.g. "A, my name is Alice and my husband's name is Alfred..")

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. How many times/week do you discuss handicaps other than deafness with your child?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. How many times/week do you communicate with your deaf child about friends and friendships?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. How many times/week do you encourage your child to communicate with hearing peers? (communicate in this case means talking, signing, gesturing, telephoning, pantomiming, etc.)

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. How many times/week do you discuss your work with your child?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
18. How many times/week do you involve your deaf child in family telephone conversations?

19. How many times/week do you explain sports to your child?

20. How many times/week do you provide experiences which encourage discussion about the birth process or which provide sex education? (about humans or animals)

21. How many times/week do you and your child observe various sports?

22. How many times/week do you answer your child's questions about religion?

23. How many times/week do you answer your child's questions about a marital dispute, if you judge the questions to be appropriate?
4. How many times/week do you ask for your deaf child's opinions and reactions during family conversation?

5. How many times/week do you ask your deaf child about how he/she feels about dating and friendships with hearing people?

6. How many times/week do you explain the use of the telephone to your deaf child and how he/she might use it?

7. How many times/week do you tell your child about the people who are invited to a family social gathering? (Social gatherings might be birthday parties, guests for dinner, picnics with neighbors, etc.)

8. How many times/week do you make suggestions as to how your deaf child can improve his/her social relationships (dating and friendships)?

9. How many times/week do you ask your child about his/her reaction to a social gathering? (e.g. Did you enjoy the picnic? Did you like playing with Cousin Frank?)
30. How many times/week do you indicate to your deaf child that he/she may ask questions about male/female relationships?

<table>
<thead>
<tr>
<th>times/week</th>
<th>less than 1/week</th>
<th>N. A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10987654321</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
COMMUNICATION BEHAVIORS CHECKLIST

This checklist should help you and us carry out the #1 priority concern of many, many deaf children and their hearing parents: The improvement of communication between hearing parents and their deaf children. A checklist enables you to do daily observing and recording of your communication with your deaf child. It also gives us an idea of the day to day and week to week changes in the frequency of your communications behaviors with your child.

Right now, and throughout the next several weeks, you will be asked to do the following things:

(1) Read all of the following questions.
(2) Choose from 5 to 10 questions. You should remember that these questions deal with the behaviors that you will be observing daily until the end of the course. Try to choose behaviors that you feel are most important to you and that you want to increase with your deaf child.
(3) Look at the example for checklisting; read and understand how to record the number of times in a day that you have done the behavior about which the question asks. Fill in your chosen questions on your checklist form.
(4) Faithfully observe yourself with your child and keep track of the number of times you do the particular behavior that you are checklisting.
(5) Set aside 10 or 15 minutes each evening to record your observations and counts of your behaviors.
(6) Turn in the completed form to your facilitator at the end of the week and obtain and fill in a new form.

Here is an example of the checklist form with sample responses:

<table>
<thead>
<tr>
<th>Questions: 2.2</th>
<th>Week #: 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many times did you communicate to your child your negative or positive feelings about a T.V. program she/he was watching?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

By completing these checklists, you will be able to see positive changes in your communication with your deaf child. Also, you will be participating in the field testing and improvement of a program which will ultimately help thousands of parents throughout the country.
QUESTIONS: (From this listing, you should pick from five to ten questions for checklisting.)

1. How many times did you communicate with your child about the work she/he did in school this week?

2. How many times did you communicate with your child about the pleasant things that happened to her/him at school this week? (e.g. praise from her/his teacher, success in an athletic event, an exciting visitor, etc.)

3. How many times did you communicate with your child about the unpleasant things that happened to her/him at school this week? (e.g. a quarrel with a friend, lost homework, physical injury, etc.)

4. How many times did you communicate with your child about the pleasant things that have happened to her/him at home today? (e.g. an interesting trip, a new toy, a visit from a favorite relative, etc.)

5. How many times did you communicate with your child about the unpleasant things that have happened to her/him at home today? (e.g. a favorite toy broken, a misunderstanding with his sibling, not being able to attend an event she/he was looking forward to, etc.)

6. How many times did you point out to your child any home situations or locations which might require caution on her/his part? (e.g., removing her/his roller skates from the bottom step, playing with matches, sticking fingers in light sockets, etc.)

7. How many times today did you point out to your child any situations in the community that might require special alertness on her/his part? (e.g. paying attention to traffic signals when crossing the street, approaching strange dogs with caution, etc.)

8. How many times today did you communicate to your child ways to avoid a specific dangerous situation in the home or community? (e.g. teaching her/him how to look both ways before crossing a street, explaining to her/him why she/he should not play with a toaster or radio with wet hands, making sure she/he knows she/he must be careful when playing around a hot iron, etc.)

9. How many times today did you set up a specific test situation to make sure the child understood how to protect herself/himself in a dangerous situation in the home or community? (e.g. allowing her/him to practice crossing the street, etc.)

10. How many times today did you communicate to your child that you were happy that she/he was playing with other (hearing or deaf) children?

11. How many times today did you communicate to your child your pleasure with the way she/he was playing with another (hearing or deaf) child?

12. How many times today did you communicate to your child your
displeasure with the way she/he was playing with another (hearing or
deaf) child?

13. How many times today did you reward behavior that you like and
want your child to repeat by immediately following the behavior with
something that your child enjoys?

14. How many times did you hug your child after she/he was good
today? (e.g. helped you with some task, shared a toy, picked up her/
his room, etc.)

15. How many times today did you touch your child affectionately
after she/he did something that pleased you?

16. When you were with your child today, how many times did you
bring to her/his attention and communicate about objects in the
environment that might be important for her/him to know about?
(e.g. police station, newspaper articles, a fire truck, etc.)

17. When you were with your child today, how many times did you
bring to her/his attention and communicate about the activities
people were involved in that might interest her/him? (e.g. a
policeman directing traffic, school children on a field trip, a
baseball game, etc.)

18. When you were with your child today, how many times did you
call to her/his attention and communicate about people that might
be of interest to her/him? (e.g. a nurse, a bus driver, a mailman,
etc.)

19. How many times today did you suggest activities that you thought
your child might like? (e.g. going to the library, visiting a museum,
baking cookies, etc.)

20. How many times today have you praised your child for doing
something that pleases you? (e.g. helping you set the table, sharing
toys, expressing affection to a sibling, etc.)

21. How many times today have you praised your child and her/his
hearing siblings for working and playing together?

22. How many times today did you communicate to your child your
negative or positive feelings about a T.V. program she/he was watching?

23. How many times today did you interpret the dialogue and/or action
of a T.V. program your child was watching for her/him?

24. How many times today did you and/or siblings explain information
presented on a T.V. newscast to your child?

25. How many times did you communicate to your child about the
successful activities of her/his siblings? (e.g. a good report card,
an award for scouting or sports, etc.)
26. If you attended a game in which your child participated, how many times did you discuss this activity with your child?

27. How many times did you ask your child about how she/he felt about meal time conversation? (e.g. did she/he understand what was communicated, did she/he have a story she/he wanted to tell, did she/he want to add something to what other members of the family were saying? etc.)

28. How many times today did you ask your child to relate an incident in her/his day?

29. How many times today did you and your child sign in public?

30. How many times today did you involve your child in a family telephone conversation? (e.g. convey messages to her/him, allow her/him to speak on the phone, explain the conversation to her/him etc.)

31. How many times today have you discussed social issues with your child? (e.g. war, VD, women's rights, etc.)

32. How many times today have you discussed your work with your child? (e.g. a mother's role in the home, community, office, etc.)

33. How many times today have you followed up a T.V. program your child has just watched by pointing out objects or situations in her/his environment related to the program?

34. How many times today have you encouraged your child to take part in specific community activities with her/his hearing peers? (e.g. "Y" activities, scouting, religious instruction, etc.)

35. How many times today have you told your child that you wanted her/him to play with the hearing children he played with?

36. How many times today did you encourage your child to communicate by talking and/or signing with hearing children?

37. How many times have you physically expressed your approval/love/affection for your child? (e.g. hugging, patting, handholding)

38. How many times today did you encourage your child to physically express affection towards you? (e.g. holding out your arms, responding to her/his physical expressions of affection, etc.)

39. How many times today did you involve your child in an appropriate family conversation by asking her/him for her/his opinion or reaction?
40. How many times today have you encouraged your child to communicate information about her/his interests or activities to other people? (e.g. peers, family members, the mail man, etc.)

41. How many times did you ask your child if she/he had any questions about something that was going on or being discussed?
COMMUNICATION BEHAVIORS CHECKLIST

This checklist should help you and us carry out the #1 priority concern of many, many deaf children and their hearing parents: The improvement of communication between hearing parents and their deaf children. A checklist enables you to do daily observing and recording of your communication with your deaf child. It also gives us an idea of the day to day and week to week changes in the frequency of your communications behaviors with your child.

Right now, and throughout the next six weeks, you will be asked to do the following things:

(1) Read all the attached questions.

(2) Choose not more than four questions. These questions all deal with communication behaviors.

(3) Select from 1-4 behaviors that you feel are very important to you and your child. These selected behaviors should be behaviors whose frequency you wish to increase.

(4) Look at the example for checklisting. Read and understand how to record the number of times in a day that you have done the behavior about which the question asks.

(5) Consider using a small pad or an index card - both of which are easily carried around with you - so that you can record the number of times that you carry out your selected communication behaviors. Perhaps you might choose to press pieces of scotch tape on the side of your arm and record your communication behaviors on these tapes. Ask your facilitator to demonstrate these techniques for you.

(6) Write your selected questions on the attached Communication Behavior Checklist form.

(7) Once you have written the questions on the Communication Behavior Checklist form, begin recording the frequency of your selected communication behaviors with your deaf child immediately after the parent meetings.

(8) Faithfully observe yourself with your child and keep a count of the number of times in a day (on a card or pad or piece of scotch tape) that you do the communication behavior about which the question asks.
(9) At the end of the day, total up the number of times you have done the selected communication behaviors and enter this total in the appropriate box. See the example below.

(10) Set aside 10 to 15 minutes each evening to tally and record these behaviors.

(11) Each week at your parent group meeting, turn this form into the facilitator. The facilitator will, at that time, provide you with a new Communication Behavior Checklist form.

(12) Once you have received a new Communication Behavior Checklist form, fill in the same questions that you have filled in during the preceding week. You will be measuring the same communication behaviors throughout your parent group sessions.

Here is an example of the checklist form with sample responses:

<table>
<thead>
<tr>
<th>Question# 22</th>
<th>Week# 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many times did you communicate to your child your negative or positive feelings about a T.V. program she/he was watching?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>A</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

By completing these checklists, you will be able to see positive changes in your communication with your deaf child. Also, you will be participating in the field testing and improvement of a program which will ultimately help thousands of parents throughout the country.
QUESTIONS: (From this listing, you should choose no more than 4 questions for checklisting.)

1. How many times did you communicate with your child about the work she/he did in school this week?

2. How many times did you communicate with your child about the pleasant things that happened to her/him at school this week? (e.g. praise from her/his teacher, success in an athletic event, an exciting visitor, etc.)

3. How many times did you communicate with your child about the unpleasant things that happened to her/him at school this week? (e.g. a quarrel with a friend, lost homework, physical injury, etc.)

4. How many times did you communicate with your child about the pleasant things that have happened to her/him at home today? (e.g. an interesting trip, a new toy, a visit from a favorite relative, etc.)

5. How many times did you communicate with your child about the unpleasant things that have happened to her/him at home today? (e.g., a favorite toy broken, a misunderstanding with his sibling, not being able to attend an event she/he was looking forward to, etc.)

6. How many times did you point out to your child any home situations or locations which might require caution on her/his part? (e.g., removing her/his roller skates from the bottom step, playing with matches, sticking fingers in light sockets, etc.)

7. How many times today did you point out to your child any situations in the community that might require special alertness on her/his part? (e.g. paying attention to traffic signals when crossing the street, approaching strange dogs with caution, etc.)

8. How many times today did you communicate to your child ways to avoid a specific dangerous situation in the home or community? (e.g. teaching her/him how to look both ways before crossing a street, explaining to her/him why she/he should not play with a toaster or radio with wet hands, making sure she/he knows she/he must be careful when playing around a hot iron, etc.)

9. How many times today did you set up a specific test situation to make sure the child understood how to protect herself/himself in a dangerous situation in the home or community? (e.g. allowing her/him to practice crossing the street, etc.)

10. How many times today did you communicate to your child that you were happy that she/he was playing with other (hearing or deaf) children?

11. How many times today did you communicate to your child your pleasure with the way she/he was playing with another (hearing or deaf) child?

12. How many times today did you communicate to your child your
displeasure with the way she/he was playing with another (hearing or deaf) child?

13. How many times today did you reward behavior that you like and want your child to repeat by immediately following the behavior with something that your child enjoys?

14. How many times did you hug your child after she/he was good today? (e.g. helped you with some task, shared a toy, picked up her/ his room, etc.)

15. How many times today did you touch your child affectionately after she/he did something that pleased you?

16. When you were with your child today, how many times did you bring to her/his attention and communicate about objects in the environment that might be important for her/him to know about? (e.g. police station, newspaper articles, a fire truck, etc.)

17. When you were with your child today, how many times did you bring to her/his attention and communicate about the activities people were involved in that might interest her/him? (e.g. a policeman directing traffic, school children on a field trip, a baseball game, etc.)

18. When you were with your child today, how many times did you call to her/his attention and communicate about people that might be of interest to her/him? (e.g. a nurse, a bus driver, a mailman, etc.)

19. How many times today did you suggest activities that you thought your child might like? (e.g. going to the library, visiting a museum, baking cookies, etc.)

20. How many times today have you praised your child for doing something that pleases you? (e.g. helping you set the table, sharing toys, expressing affection to a sibling, etc.)

21. How many times today have you praised your child and her/his hearing siblings for working and playing together?

22. How many times today did you communicate to your child your negative or positive feelings about a T.V. program she/he was watching?

23. How many times today did you interpret the dialogue and/or action of a T.V. program your child was watching for her/him?

24. How many times today did you and/or siblings explain information presented on a T.V. newscast to your child?

25. How many times did you communicate to your child about the successful activities of her/his siblings? (e.g. a good report card, an award for scouting or sports, etc.)
26. If you attended a game in which your child participated, how many times did you discuss this activity with your child?

27. How many times did you ask your child about how she/he felt about meal time conversation? (e.g. did she/he understand what was communicated, did she/he have a story she/he wanted to tell, did she/he want to add something to what other members of the family were saying? etc.)

28. How many times today did you ask your child to relate an incident in her/his day?

29. How many times today did you and your child sign in public?

30. How many times today did you involve your child in a family telephone conversation? (e.g. convey messages to her/him, allow her/him to speak on the phone, explain the conversation to her/him etc.)

31. How many times today have you discussed social issues with your child? (e.g. war, VD, women's rights, etc.)

32. How many times today have you discussed your work with your child? (e.g. a mother's role in the home, community, office, etc.)

33. How many times today have you followed up a T.V. program your child has just watched by pointing out objects or situations in her/his environment related to the program?

34. How many times today have you encouraged your child to take part in specific community activities with her/his hearing peers? (e.g. "y" activities, scouting, religious instruction, etc.)

35. How many times today have you told your child that you wanted her/him to play with the hearing children he played with?

36. How many times today did you encourage your child to communicate by talking and/or signing with hearing children?

37. How many times have you physically expressed your approval/love/affection for your child? (e.g. hugging, patting, handholding)

38. How many times today did you encourage your child to physically express affection towards you? (e.g. holding out your arms, responding to her/his physical expressions of affection, etc.)

39. How many times today did you involve your child in an appropriate family conversation by asking her/him for her/his opinion or reaction?
40. How many times today have you encouraged your child to communicate information about her/his interests or activities to other people? (e.g. peers, family members, the mail man, etc.)

41. How many times did you ask your child if she/he had any questions about something that was going on or being discussed?
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Question #</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question #</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question #</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Facilitator ____________________________
What do you see as your major problem(s) with your deaf child? Please try to explain as clearly and specifically as possible.
OPEN FORUM

1. What do you now see as your major problem(s) with your deaf child? Please try to explain as clearly and specifically as possible.
OPEN FORUM

2. Do you have any comments and opinions (favorable or unfavorable) on this six week parent education program?
3. What did you enjoy most about the sessions?

4. What changes would you make in this program?

5. Comments and/or opinions:
Appendix III:

Summary Tables for the Analyses of Variance
### Table IIIA  Summary Table for Analysis of Variance of Gain Scores: $M_1/M_3$ and Oral/Total

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>Df</th>
<th>Ms</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>$M_1-M_3$ (A)</td>
<td>64.80</td>
<td>1</td>
<td>64.80</td>
<td>.125</td>
<td>.725</td>
</tr>
<tr>
<td>Oral-Total (B)</td>
<td>183.93</td>
<td>1</td>
<td>183.93</td>
<td>.356</td>
<td>.554</td>
</tr>
<tr>
<td>$A \times B$</td>
<td>66.65</td>
<td>1</td>
<td>66.65</td>
<td>.129</td>
<td>.721</td>
</tr>
<tr>
<td>SSE</td>
<td>516.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table IIIB  Summary Table for Analysis of Variance of Gain Scores: Oral/Total and Parent/Educator

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>Df</th>
<th>Ms</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral-Total (A)</td>
<td>189.72</td>
<td>1</td>
<td>189.72</td>
<td>.410</td>
<td>.036</td>
</tr>
<tr>
<td>Parent-Educator (A)</td>
<td>14.03</td>
<td>1</td>
<td>14.03</td>
<td>.030</td>
<td>.863</td>
</tr>
<tr>
<td>$A \times B$</td>
<td>2281.82</td>
<td>1</td>
<td>2281.82</td>
<td>4.935</td>
<td>.032</td>
</tr>
<tr>
<td>SSE</td>
<td>462.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>SS</td>
<td>DF</td>
<td>Ms</td>
<td>F</td>
<td>P</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------</td>
<td>----</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>$M_1 - M_3$ (A)</td>
<td>10.49</td>
<td>1</td>
<td>10.49</td>
<td>0.019</td>
<td>0.890</td>
</tr>
<tr>
<td>Parent-Educator (B)</td>
<td>0.39</td>
<td>1</td>
<td>0.39</td>
<td>0.001</td>
<td>0.979</td>
</tr>
<tr>
<td>$A \times B$</td>
<td>252.51</td>
<td>1</td>
<td>252.51</td>
<td>0.467</td>
<td>0.498</td>
</tr>
<tr>
<td>SSE</td>
<td>540.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table IIIID  Summary Table for the Analysis of Variance of Parent-Facilitator Interactions of M₁OP, M₁OE and M₁TP

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>Df</th>
<th>Ms</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>486.12</td>
<td>2</td>
<td>243.06</td>
<td>1.18</td>
<td>.322</td>
</tr>
<tr>
<td>Within Groups</td>
<td>5553.25</td>
<td>27</td>
<td>205.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6039.37</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table IIIIE  Summary Table for the Analysis of Variance of Parent-Parent Interactions of M₁OP, M₁OE and M₁TP

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>Df</th>
<th>Ms</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1298.44</td>
<td>2</td>
<td>649.22</td>
<td>5.775</td>
<td>.008</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3035.49</td>
<td>27</td>
<td>112.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4333.87</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table IIIF  Summary Table for the Analysis of Variance of Individual Total Interactions of $M_{1OP}$, $M_{1OE}$ and $M_{1TP}$

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3416.72</td>
<td>2</td>
<td>1708.36</td>
<td>9.888</td>
<td>.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4664.64</td>
<td>27</td>
<td>172.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8081.37</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix IV:

Tables of Parent Responses to Individual Pre and Post-test Questions
### Table IVA: Percentage of Parent Response to Each Question for ALL (M1 and M3/oral and total) Groups on both the Pre and Post-test (pretest n = 80) (post n = 74) (total n = 154)

<table>
<thead>
<tr>
<th>Questions pre/post test</th>
<th>Pretest %</th>
<th>Post-test %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/6</td>
<td>17%</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>2/13</td>
<td>19%</td>
<td>29%</td>
<td>24%</td>
</tr>
<tr>
<td>3/2</td>
<td>69%</td>
<td>43%</td>
<td>56%</td>
</tr>
<tr>
<td>4/16</td>
<td>70%</td>
<td>69%</td>
<td>69.5%</td>
</tr>
<tr>
<td>5/20</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>6/4</td>
<td>12%</td>
<td>24%</td>
<td>18%</td>
</tr>
<tr>
<td>7/3</td>
<td>11%</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>8/11</td>
<td>9%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>9/23</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>10/21</td>
<td>28%</td>
<td>21%</td>
<td>25%</td>
</tr>
<tr>
<td>11/19</td>
<td>22%</td>
<td>21%</td>
<td>21.5%</td>
</tr>
<tr>
<td>12/24</td>
<td>42%</td>
<td>38%</td>
<td>40%</td>
</tr>
<tr>
<td>13/12</td>
<td>66%</td>
<td>70%</td>
<td>68%</td>
</tr>
<tr>
<td>14/9</td>
<td>10%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>15/22</td>
<td>15%</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>16/7</td>
<td>25%</td>
<td>31%</td>
<td>28%</td>
</tr>
<tr>
<td>17/27</td>
<td>33%</td>
<td>30%</td>
<td>32%</td>
</tr>
<tr>
<td>18/29</td>
<td>25%</td>
<td>41%</td>
<td>32%</td>
</tr>
<tr>
<td>19/18</td>
<td>21%</td>
<td>33%</td>
<td>27%</td>
</tr>
<tr>
<td>20/10*</td>
<td>12%</td>
<td>46%</td>
<td>28%</td>
</tr>
<tr>
<td>21/26</td>
<td>16%</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td>22/14</td>
<td>12%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>23/8</td>
<td>3%</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>24/15</td>
<td>46%</td>
<td>50%</td>
<td>48%</td>
</tr>
<tr>
<td>25/28</td>
<td>21%</td>
<td>16%</td>
<td>19%</td>
</tr>
<tr>
<td>26/25</td>
<td>2%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>27/30</td>
<td>4%</td>
<td>12%</td>
<td>8%</td>
</tr>
</tbody>
</table>

The percentage increase in 20/10 should be attributed to a change in the written questionnaire based on suggestions by the facilitators of the oral groups. See Table P, columns 1 and 3, #20/10 for a truer picture.
Table IVB Percentages of Above 25% Response to Individual Questions by Parents on the Pre and Post-tests
(pretest n = 80) (post-test n = 74)

<table>
<thead>
<tr>
<th>Question #</th>
<th>Pretest #</th>
<th>Posttest #</th>
<th>Parent Behavior (briefly)</th>
<th>Pretest %</th>
<th>Posttest %</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>2</td>
<td>Encouraging child’s play with hearing peers</td>
<td>96%</td>
<td>43%</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>16</td>
<td>Encouraging child’s communication w/ hearing peers</td>
<td>70%</td>
<td>69%</td>
</tr>
<tr>
<td>10</td>
<td>21</td>
<td>21</td>
<td>Observing sports w/ child</td>
<td>28%</td>
<td>21%</td>
</tr>
<tr>
<td>12</td>
<td>24</td>
<td>24</td>
<td>Asking for child’s opinions and reactions</td>
<td>42%</td>
<td>38%</td>
</tr>
<tr>
<td>13</td>
<td>12</td>
<td>12</td>
<td>Asking child to relate incident</td>
<td>66%</td>
<td>70%</td>
</tr>
<tr>
<td>17</td>
<td>27</td>
<td>27</td>
<td>Providing child with information about people at social gathering</td>
<td>33%</td>
<td>30%</td>
</tr>
<tr>
<td>24</td>
<td>15</td>
<td>15</td>
<td>Communication w/ child about friends &amp; friendship</td>
<td>46%</td>
<td>50%</td>
</tr>
<tr>
<td>29</td>
<td>17</td>
<td>17</td>
<td>Discussing work w/ child</td>
<td>31%</td>
<td>39%</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
<td>13</td>
<td>Teaching child language from games</td>
<td>19%</td>
<td>29%</td>
</tr>
<tr>
<td>16</td>
<td>7</td>
<td>7</td>
<td>Sharing religious activities with child</td>
<td>25%</td>
<td>31%</td>
</tr>
<tr>
<td>18</td>
<td>29</td>
<td>29</td>
<td>Asking child for reaction to social gathering</td>
<td>25%</td>
<td>41%</td>
</tr>
<tr>
<td>19</td>
<td>18</td>
<td>18</td>
<td>Involving child in family telephone conversations</td>
<td>21%</td>
<td>33%</td>
</tr>
<tr>
<td>20</td>
<td>10</td>
<td>10</td>
<td>Asking the child about effectiveness of communication being used</td>
<td>12%</td>
<td>46%</td>
</tr>
<tr>
<td>21</td>
<td>26</td>
<td>26</td>
<td>Explaining to child use of telephone</td>
<td>16%</td>
<td>25%</td>
</tr>
</tbody>
</table>
Table IVC Percentages of Below 10% Response to Individual Questions by Parents on the Pre and Post-tests (pretest n = 80) (post-test n = 74)

<table>
<thead>
<tr>
<th>Question#</th>
<th>Pretest#</th>
<th>Posttest#</th>
<th>Parent Behavior (briefly)</th>
<th>Pretest#</th>
<th>Posttest#</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>30</td>
<td></td>
<td>Discussing male/female relationships w/ child</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>28</td>
<td>1</td>
<td></td>
<td>Discussing social issues w/ child</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>30</td>
<td>5</td>
<td></td>
<td>Discussing future plans w/ child</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>8</td>
<td>11</td>
<td></td>
<td>Clarifying parents' interaction</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>9</td>
<td>23</td>
<td></td>
<td>Clarifying parents' interaction</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>14</td>
<td>9</td>
<td></td>
<td>Encouraging child's discussion of feelings about being deaf</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>26</td>
<td>25</td>
<td></td>
<td>Discussing having a social life with hearing people</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>23</td>
<td>8</td>
<td></td>
<td>Discussing dating</td>
<td>3%</td>
<td>11%</td>
</tr>
</tbody>
</table>
Table IVD  
Comparison of Above 25% Percentages for $M_1$ Groups for Individual Questions on the Pre and Post-tests (pretest $n = 49$) (post-test $n = 27$)

<table>
<thead>
<tr>
<th>Question# Pre/post-test</th>
<th>Pretest percentages</th>
<th>Post-test percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1OP$</td>
<td>$M_1OE$</td>
</tr>
<tr>
<td>3/2</td>
<td>76%</td>
<td>70%</td>
</tr>
<tr>
<td>4/16</td>
<td>74%</td>
<td>64%</td>
</tr>
<tr>
<td>10/21</td>
<td>25%</td>
<td>32%</td>
</tr>
<tr>
<td>12/24</td>
<td>17%</td>
<td>63%</td>
</tr>
<tr>
<td>13/12</td>
<td>25%</td>
<td>39%</td>
</tr>
<tr>
<td>17/27</td>
<td>25%</td>
<td>39%</td>
</tr>
<tr>
<td>24/15</td>
<td>30%</td>
<td>56%</td>
</tr>
<tr>
<td>29/17</td>
<td>18%</td>
<td>41%</td>
</tr>
<tr>
<td>2/13</td>
<td>11%</td>
<td>26%</td>
</tr>
<tr>
<td>16/7</td>
<td>19%</td>
<td>49%</td>
</tr>
<tr>
<td>18/29</td>
<td>17%</td>
<td>37%</td>
</tr>
<tr>
<td>19/18</td>
<td>29%</td>
<td>31%</td>
</tr>
<tr>
<td>20/10</td>
<td>---**</td>
<td>16%</td>
</tr>
<tr>
<td>21/26</td>
<td>21%</td>
<td>27%</td>
</tr>
</tbody>
</table>

*No post-test returns from $M_1TE$ group in Washington, D.C.

**Less than 1% of maximum potential frequency for the behavior in question reported by parents in that group.

For the following tables, a single line will mean no post-test returns from $M_1TE$ and a double line will mean that less than 1% of maximum potential frequency for that behavior was reported by parents in that group.
Table IVE: Comparison of Below 10% Percentages for \( M_1 \) Groups for Individual Questions on the Pre and Post-tests

<table>
<thead>
<tr>
<th>Question#</th>
<th>Pre/post-test</th>
<th>Pretest percentages</th>
<th>Post-test percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( M_1\text{OP} )</td>
<td>( M_1\text{OE} )</td>
</tr>
<tr>
<td>27/30</td>
<td></td>
<td>===</td>
<td>===</td>
</tr>
<tr>
<td>28/1</td>
<td></td>
<td>===</td>
<td>3%</td>
</tr>
<tr>
<td>30/5</td>
<td></td>
<td>===</td>
<td>2%</td>
</tr>
<tr>
<td>8/11</td>
<td></td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>9/23</td>
<td></td>
<td>===</td>
<td>11%</td>
</tr>
<tr>
<td>14/9</td>
<td></td>
<td>2%</td>
<td>18%</td>
</tr>
<tr>
<td>26/25</td>
<td></td>
<td>===</td>
<td>===</td>
</tr>
<tr>
<td>23/8</td>
<td></td>
<td>===</td>
<td>7%</td>
</tr>
</tbody>
</table>
Table IVF

Comparison of Above 25% Percentages for M₃ Groups for Individual Questions on the Pre and Post-tests (pretest n = 27)  (post-test n = 47)

<table>
<thead>
<tr>
<th>Question# Pre/post-test</th>
<th>Pretest percentages</th>
<th></th>
<th></th>
<th></th>
<th>Post-test percentages</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M₃OP</td>
<td>M₃OE</td>
<td>M₃TP</td>
<td>M₃TE</td>
<td>M₃OP</td>
<td>M₃OE</td>
<td>M₃TP</td>
<td>M₃TE</td>
</tr>
<tr>
<td>3/2</td>
<td>76%</td>
<td>60%</td>
<td>82%</td>
<td>43%</td>
<td>40%</td>
<td>28%</td>
<td>52%</td>
<td>60%</td>
</tr>
<tr>
<td>4/16</td>
<td>78%</td>
<td>66%</td>
<td>100%</td>
<td>46%</td>
<td>72%</td>
<td>66%</td>
<td>62%</td>
<td>76%</td>
</tr>
<tr>
<td>10/21</td>
<td>19%</td>
<td>14%</td>
<td>49%</td>
<td>20%</td>
<td>14%</td>
<td>23%</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>12/24</td>
<td>52%</td>
<td>42%</td>
<td>64%</td>
<td>43%</td>
<td>40%</td>
<td>39%</td>
<td>32%</td>
<td>48%</td>
</tr>
<tr>
<td>13/12</td>
<td>70%</td>
<td>78%</td>
<td>86%</td>
<td>23%</td>
<td>66%</td>
<td>70%</td>
<td>65%</td>
<td>63%</td>
</tr>
<tr>
<td>17/27</td>
<td>18%</td>
<td>24%</td>
<td>54%</td>
<td>43%</td>
<td>20%</td>
<td>20%</td>
<td>33%</td>
<td>50%</td>
</tr>
<tr>
<td>24/15</td>
<td>38%</td>
<td>26%</td>
<td>67%</td>
<td>77%</td>
<td>44%</td>
<td>45%</td>
<td>46%</td>
<td>73%</td>
</tr>
<tr>
<td>29/7</td>
<td>31%</td>
<td>26%</td>
<td>46%</td>
<td>53%</td>
<td>32%</td>
<td>47%</td>
<td>37%</td>
<td>53%</td>
</tr>
<tr>
<td>2/13</td>
<td>22%</td>
<td>22%</td>
<td>20%</td>
<td>71%</td>
<td>40%</td>
<td>28%</td>
<td>38%</td>
<td>35%</td>
</tr>
<tr>
<td>16/7</td>
<td>10%</td>
<td>12%</td>
<td>21%</td>
<td>34%</td>
<td>27%</td>
<td>19%</td>
<td>30%</td>
<td>51%</td>
</tr>
<tr>
<td>19/18</td>
<td>21%</td>
<td>12%</td>
<td>31%</td>
<td>27%</td>
<td>18%</td>
<td>32%</td>
<td>31%</td>
<td>55%</td>
</tr>
<tr>
<td>20/10</td>
<td>17%</td>
<td>6%</td>
<td>19%</td>
<td>17%</td>
<td>56%</td>
<td>65%</td>
<td>55%</td>
<td>28%</td>
</tr>
<tr>
<td>21/26</td>
<td>23%</td>
<td>4%</td>
<td>21%</td>
<td>20%</td>
<td>23%</td>
<td>29%</td>
<td>26%</td>
<td>46%</td>
</tr>
<tr>
<td>18/29</td>
<td>8%</td>
<td>18%</td>
<td>34%</td>
<td>23%</td>
<td>42%</td>
<td>42%</td>
<td>46%</td>
<td>36%</td>
</tr>
</tbody>
</table>
Table IVG  Comparison of Below 10% Percentages for M3 Groups for Individual Questions on the Pre and Post-tests

<table>
<thead>
<tr>
<th>Question# Pre/post-test</th>
<th>Pretest percentages</th>
<th>Post-test percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M3OP</td>
<td>M3OE</td>
</tr>
<tr>
<td>27/30</td>
<td>===</td>
<td>3%</td>
</tr>
<tr>
<td>28/1</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>30/5</td>
<td>3%</td>
<td>16%</td>
</tr>
<tr>
<td>8/11</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>9/23</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>14/9</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>26/25</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>23/8</td>
<td>===</td>
<td>6%</td>
</tr>
</tbody>
</table>
Table IVH  

Comparison of Change from Pre to Post-test for Individual (above 25%) Questions in $M_1$ vs. $M_3$ Groups and Oral vs. Total Groups

<table>
<thead>
<tr>
<th>Question#</th>
<th>Change Score (Post-test% - Pretest%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1OP$</td>
</tr>
<tr>
<td>3/2</td>
<td>-13%</td>
</tr>
<tr>
<td>4/16</td>
<td>-2%</td>
</tr>
<tr>
<td>10/21</td>
<td>-10%</td>
</tr>
<tr>
<td>12/24</td>
<td>+33%</td>
</tr>
<tr>
<td>13/12</td>
<td>+58%</td>
</tr>
<tr>
<td>17/27</td>
<td>-2%</td>
</tr>
<tr>
<td>24/15</td>
<td>+30%</td>
</tr>
<tr>
<td>29/17</td>
<td>+22%</td>
</tr>
<tr>
<td>2/13</td>
<td>+9%</td>
</tr>
<tr>
<td>16/7</td>
<td>+14%</td>
</tr>
<tr>
<td>18/29</td>
<td>+18%</td>
</tr>
<tr>
<td>19/18</td>
<td>-4%</td>
</tr>
<tr>
<td>20/10</td>
<td>+25%</td>
</tr>
<tr>
<td>21/26</td>
<td>+1%</td>
</tr>
</tbody>
</table>

***Hereafter, XXX will represent no change from pretest to post-test.
Table IVI Comparison of Change From Pre to Post-test for Individual (Below 10%) Questions in M1 vs. M3 Groups and Oral vs. Total Groups

<table>
<thead>
<tr>
<th>Question #</th>
<th>Pre/post-test</th>
<th>M1OP</th>
<th>M1OE</th>
<th>M1TP</th>
<th>M1TE</th>
<th>M2OP</th>
<th>M2OE</th>
<th>M3TP</th>
<th>M3TE</th>
</tr>
</thead>
<tbody>
<tr>
<td>27/30</td>
<td>+2% +4%</td>
<td>+16%</td>
<td>---*</td>
<td>+2%</td>
<td>+6%</td>
<td>+22%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28/1</td>
<td>+2% +2%</td>
<td>+1%</td>
<td>---</td>
<td>-3%</td>
<td>-1%</td>
<td>+11%</td>
<td>-2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30/5</td>
<td>XXX +2%</td>
<td>-6%</td>
<td>---</td>
<td>-3%</td>
<td>-1%</td>
<td>XXX</td>
<td>+21%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/11</td>
<td>+4% +4%</td>
<td>-11%</td>
<td>---</td>
<td>+2%</td>
<td>XXX</td>
<td>-15%</td>
<td>+1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/23</td>
<td>+2% +9%</td>
<td>XXX</td>
<td>---</td>
<td>-1%</td>
<td>XXX</td>
<td>-14%</td>
<td>+8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14/9</td>
<td>+15% -10%</td>
<td>+4%</td>
<td>---</td>
<td>-1%</td>
<td>+11%</td>
<td>-5%</td>
<td>+9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26/25</td>
<td>+2% +8%</td>
<td>+6%</td>
<td>---</td>
<td>-6%</td>
<td>+3%</td>
<td>+3%</td>
<td>+19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23/8</td>
<td>+2% +13%</td>
<td>+9%</td>
<td>---</td>
<td>+5%</td>
<td>XXX</td>
<td>+3%</td>
<td>+15%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*No post-tests for M1TE were received. Therefore, there are no change scores under M1TE.

** No change from pretest to post-test.
Table IVJ

Comparison of Above 25% Percentages for Individual Questions from Oral Communication Groups on the Pre and Post-tests.
(pretest n = 44)  (post-test n = 41)

<table>
<thead>
<tr>
<th>Question#</th>
<th>Pre/post-test</th>
<th>M1OP</th>
<th>M1OE</th>
<th>M2OP</th>
<th>M2OE</th>
<th>M1OP</th>
<th>M1OE</th>
<th>M2OP</th>
<th>M2OE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/2</td>
<td>76%</td>
<td>70%</td>
<td>76%</td>
<td>60%</td>
<td>63%</td>
<td>63%</td>
<td>40%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>4/16</td>
<td>74%</td>
<td>64%</td>
<td>78%</td>
<td>66%</td>
<td>72%</td>
<td>75%</td>
<td>72%</td>
<td>66%</td>
<td></td>
</tr>
<tr>
<td>10/21</td>
<td>25%</td>
<td>32%</td>
<td>19%</td>
<td>14%</td>
<td>15%</td>
<td>15%</td>
<td>14%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>12/24</td>
<td>17%</td>
<td>63%</td>
<td>52%</td>
<td>42%</td>
<td>50%</td>
<td>56%</td>
<td>40%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>13/12</td>
<td>25%</td>
<td>39%</td>
<td>70%</td>
<td>78%</td>
<td>83%</td>
<td>82%</td>
<td>66%</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>17/27</td>
<td>25%</td>
<td>39%</td>
<td>18%</td>
<td>24%</td>
<td>23%</td>
<td>38%</td>
<td>20%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>24/15</td>
<td>30%</td>
<td>56%</td>
<td>38%</td>
<td>26%</td>
<td>60%</td>
<td>52%</td>
<td>44%</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>29/17</td>
<td>18%</td>
<td>41%</td>
<td>31%</td>
<td>26%</td>
<td>40%</td>
<td>34%</td>
<td>32%</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>2/13</td>
<td>11%</td>
<td>26%</td>
<td>22%</td>
<td>22%</td>
<td>20%</td>
<td>20%</td>
<td>40%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>16/7</td>
<td>19%</td>
<td>49%</td>
<td>10%</td>
<td>12%</td>
<td>33%</td>
<td>48%</td>
<td>27%</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>18/29</td>
<td>17%</td>
<td>37%</td>
<td>8%</td>
<td>18%</td>
<td>35%</td>
<td>45%</td>
<td>42%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>19/18</td>
<td>29%</td>
<td>31%</td>
<td>21%</td>
<td>12%</td>
<td>25%</td>
<td>32%</td>
<td>18%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>20/10</td>
<td>= = = = =</td>
<td>16%</td>
<td>17%</td>
<td>6%</td>
<td>25%</td>
<td>52%</td>
<td>56%</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>21/26</td>
<td>21%</td>
<td>27%</td>
<td>23%</td>
<td>4%</td>
<td>22%</td>
<td>18%</td>
<td>23%</td>
<td>29%</td>
<td></td>
</tr>
</tbody>
</table>
Table IVK  
Comparison of Below 10% Percentages for Individual Questions from Oral Groups on the Pre and Post-tests.

<table>
<thead>
<tr>
<th>Question# Pre/post-test</th>
<th>Pretest percentages</th>
<th>Post-test percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M₁OP</td>
<td>M₁OE</td>
</tr>
<tr>
<td>27/30</td>
<td>===</td>
<td>===</td>
</tr>
<tr>
<td>28/1</td>
<td>===</td>
<td>3%</td>
</tr>
<tr>
<td>30/5</td>
<td>===</td>
<td>2%</td>
</tr>
<tr>
<td>8/11</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>9/23</td>
<td>===</td>
<td>11%</td>
</tr>
<tr>
<td>14/9</td>
<td>2%</td>
<td>18%</td>
</tr>
<tr>
<td>26/25</td>
<td>===</td>
<td>===</td>
</tr>
<tr>
<td>23/8</td>
<td>===</td>
<td>7%</td>
</tr>
</tbody>
</table>
Table IVL  Comparison of Above 25% Percentages for Individual Questions from Total Communication Groups on the Pre and Post-test. (pretest n = 32) (post-test n = 33)

<table>
<thead>
<tr>
<th>Question#</th>
<th>Pre/post-test</th>
<th>Pretest percentages</th>
<th>Post-test percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M_1TP</td>
<td>M_1TE</td>
<td>M_2TP</td>
</tr>
<tr>
<td>3/2</td>
<td>78%</td>
<td>76%</td>
<td>82%</td>
</tr>
<tr>
<td>4/16</td>
<td>78%</td>
<td>72%</td>
<td>100%</td>
</tr>
<tr>
<td>10/21</td>
<td>30%</td>
<td>42%</td>
<td>49%</td>
</tr>
<tr>
<td>12/24</td>
<td>32%</td>
<td>46%</td>
<td>64%</td>
</tr>
<tr>
<td>13/12</td>
<td>73%</td>
<td>57%</td>
<td>86%</td>
</tr>
<tr>
<td>17/27</td>
<td>33%</td>
<td>57%</td>
<td>54%</td>
</tr>
<tr>
<td>24/15</td>
<td>52%</td>
<td>60%</td>
<td>67%</td>
</tr>
<tr>
<td>29/17</td>
<td>22%</td>
<td>42%</td>
<td>46%</td>
</tr>
<tr>
<td>2/13</td>
<td>18%</td>
<td>28%</td>
<td>20%</td>
</tr>
<tr>
<td>16/7</td>
<td>15%</td>
<td>37%</td>
<td>21%</td>
</tr>
<tr>
<td>19/18</td>
<td>21%</td>
<td>41%</td>
<td>31%</td>
</tr>
<tr>
<td>20/10</td>
<td>12%</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>21/26</td>
<td>18%</td>
<td>42%</td>
<td>21%</td>
</tr>
<tr>
<td>18/29</td>
<td>25%</td>
<td>46%</td>
<td>34%</td>
</tr>
</tbody>
</table>
Table IV

Comparison of Below 10% Percentages for Individual Questions from Total Communication Groups on the Pre and Post-tests.
(pretest n = 32)  (post-test n = 23)

<table>
<thead>
<tr>
<th>Question#</th>
<th>Pre/post-test</th>
<th>Pretest percentages</th>
<th>Post-test percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M₁TP</td>
<td>M₁TE</td>
<td>M₃TP</td>
</tr>
<tr>
<td>27/30</td>
<td>10%</td>
<td>2%</td>
<td>19%</td>
</tr>
<tr>
<td>28/1</td>
<td>5%</td>
<td>---</td>
<td>7%</td>
</tr>
<tr>
<td>30/5</td>
<td>8%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>8/11</td>
<td>8%</td>
<td>14%</td>
<td>24%</td>
</tr>
<tr>
<td>9/23</td>
<td>9%</td>
<td>26%</td>
<td>24%</td>
</tr>
<tr>
<td>14/9</td>
<td>9%</td>
<td>6%</td>
<td>17%</td>
</tr>
<tr>
<td>26/25</td>
<td>---</td>
<td>---</td>
<td>8%</td>
</tr>
<tr>
<td>23/8</td>
<td>---</td>
<td>2%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Appendix V:

Changes In and Additions To

The NRMCD Program
"Oh, Cousin Jack has bad pimples!"
Mommy, here's fat lady!
I. Description of the Visual

A mother and her deaf daughter are in a supermarket. The child has opened up some unopened chips and is munching on them. The mother sees this and starts to grab at the daughter. The daughter steps back, away from the mother, and is about to knock down a pyramid of CRUSH ME toilet paper.

II. Suggested Questions and Activities

Questions: What's happening here? What can the mother do? What can the parent of a deaf child do to teach the child appropriate behavior in a supermarket? Has this happened to you? What did you do? What might onlookers think?

III. Subjects for Discussion and Parent Reaction

Focus discussion on these general areas:
(1) Appropriate public behavior.
(2) Rehearsal with the child of appropriate behavior in frequently visited public places.
(3) The explanation of "accidents" to a deaf child.
(4) The public and deafness.
(5) Mother's temper.

IV. Parent Behaviors

(1) The parent communicates with the child about places like supermarkets and laundromats.
(2) The parent uses an older deaf child or hearing child to model appropriate behavior.
(3) The parent rewards the child when she/he behaves appropriately in these settings.
(4) The parent communicates with the child (through words, signs and/or pictures) about the concept of "accident".
I. Description of the Visual

A father and his deaf daughter answer the door. Cousin Jack has come to visit. The deaf girl responds to the blemishes on Jack's face.

II. Suggested Questions and Activities

Questions: What should the father do? What should he communicate to his daughter? What should he say to Jack? What might Cousin Jack do? Should he do anything? How have you handled similar situations?

III. Subjects for Discussion and Parent Reaction

Focus discussion on these general areas:
(1) The deaf child's preparation for the unusual, the extraordinary, the exceptional.
(2) Appropriate behavior for the deaf child.
(3) Aiding the deaf child to understand and appropriately respond to unusual and/or unexpected people or events.

IV. Parent Behaviors

(1) The parent anticipates the child's response to the unexpected and prepares him/her beforehand.
(2) The parent discusses conditions like pimples, freckles, etc. when they are encountered and in a natural, relaxed fashion.
(3) The parent seeks out pictures (in magazines, for example) of persons with these kinds of physical conditions and communicates to the child about them.
I. Description of the Visual

A mother, father and their deaf son are in the pediatrician's waiting room. The doctor comes through the door to greet the family. The son, recognizing the doctor, draws attention to the doctor's obesity. The parents react.

II. Suggested Questions and Activities

Questions: What should the mother do? Should she warmly answer her son's exclamation? Should she reprimand her son for being rude? Is the son being rude? What should the father do? How about the doctor? Have you ever been in a similar situation? What was the situation and what did you do? How can such situations be resolved?
Activities: Role play similar situations.

III. Subjects for Discussion and Parent Reaction

Focus discussion on these general areas:
(1) The public and deafness.
(2) Appropriate behavior for the deaf child.
(3) Aiding the deaf child to understand and appropriately respond to unusual and/or exceptional people and events.

IV. Parent Behaviors

(1) The parent anticipates the doctor's obesity (in this case) and discusses it with the child before the embarrassing situation occurs.
(2) The parent communicates to the child about the unusual or the unexpected whenever it is encountered.
(3) The parent asks the unusual and/or exceptional person to communicate with the deaf child and thus, to diminish the child's discomfort.
(4) The parent talks about fatness or baldness or physical handicaps (etc) when they appear on television or in a magazine.
I. Description of the Visual

A mother, her daughter and the Avvon lady are gathered around a coffee table. While the Avvon lady and the mother try to talk, the daughter attempts to get into the dialogue.

II. Suggested Questions and Activities

Questions: What's happening here? What do the people in the visual want? Should the daughter get what she wants? Will she? Have you had similar experiences with your deaf child? How do you handle them? What would you suggest to the mother? How does the Avvon lady respond?

III. Subjects for Discussion and Parent Reaction

(1) The attention-seeking behavior of the child.
(2) The child's need to know and be involved vs. the mother's need to fulfill her very justifiable interests and needs.
(3) Individual parent's definitions of appropriate and inappropriate behavior.

IV. Parent Behaviors

(1) The parent clearly communicates his/her displeasure with the child's disruptive attention-seeking behavior.
(2) If ignoring the behavior does not terminate it, the parent removes the child from the room.
(3) The parent rewards the child when the child does not disrupt the parent's activities.
(4) The parents discuss the possible causes for attention-seeking behavior by the child.
Discipline or child management or behavior control or setting limits or whatever parents may choose to call it is a major problem for all parents of all children. The problem is exacerbated when the child is deaf and communication is impeded or restricted. Because of this heightened problem, facilitators are urged to familiarize themselves with operant child management (behavior modification) techniques and to be able to instruct parents in their use with deaf children. The following several books will be especially helpful; annotation for these books is included in the Resource Listing at the rear of this manual.


Facilitators should read at least two of these suggested resources. This will enable facilitators to help parents select their children's target behaviors, to plan programs to change these behaviors and to record the results of these programs. Parents will be learning a process for dealing with troublesome "discipline" problems, a process that they can individually apply to behavioral concerns as they arise.
Utilization with Adolescents and Parents: Although the program was designed for use with parent groups, parents and educators pointed out many potential uses with adolescents and their parents. Because of this interest and ingenuity, the visuals have now been looked at in this light.

The Learning Center for Deaf Children in Framingham, Massachusetts chose the following way of utilizing the open-ended materials: A group of deaf adolescents gathered and reacted to the visuals. They told what they saw happening and how they felt about it; perhaps, more importantly, when looking at the visuals, they described how the parents in the picture were feeling and what they thought the parents should do. The adolescents' responses were recorded and offered to the parents during their discussions of the situations which the visuals depict.

Another possible method is to gather deaf adolescents and their parents to respond together to the open-ended visuals. Visuals #35-48 would be especially relevant to the interests and concerns of the adolescents and their parents. These visuals deal with issues of dating, shopping, career choice, sex education, marriage, etc. Directions for the treatment of these is provided within this facilitator's manual. Only slight alterations of the Suggested Questions and Activities, Subjects for Discussion and Parent Reaction and Parent Behavior sections need to be made; these alterations should focus on the discussion of adolescent behaviors as well as parent behaviors which will facilitate this parent-child communication. Viewing these visuals in groups made up of parents and adolescents is likely to encourage the kind of dialogue which too often goes unsaid and/or unsigned. Certainly it is an emphasis worth including in an educational system.
Parent education at schools for the deaf has traditionally taken three forms: (1) large group lectures; (2) small group (8 - 15 persons) discussions; and (3) individual parent counseling. All of these forms are appropriate for accomplishing different objectives. Large groups are most often used to convey an expert's advice to many parents who would not have the opportunity to talk with this expert on an individual basis. Small groups are often used to encourage supportive interaction between group members, to exchange information and ideas, and to discuss subjects which are subjective and perhaps controversial in nature. Individual counseling aims towards helping the parents express their concerns and finding individual solutions for these concerns. The parent education transparencies and this facilitator's manual are designed to be optimally used with small groups.

The transparencies stimulate discussion among parents and parents and among parents and group leaders. It is this discussion which evokes the sharing of experiences, the discovery of differences and likenesses in attitudes and behaviors towards deaf children, and the suggestion and implementation of specific parent behaviors leading to specific parent-established goals.

I. **Grouping**

**Size:** Make efforts to assure that the group size does not exceed 15 and does not drop below 6. The transparencies often generate the telling of personal experiences and the comparison of behaviors and feelings within those experiences. Because of the need for varying viewpoints and approaches in the discussion, a group of 6 or more parents is suggested. Because of the personal and occasionally controversial responses evoked by the materials, it is better to hold the group under 15. As the group swells, it is more
difficult for individual parents to share their problems and successes in practicing some more effective communication behaviors.

Participants: Parent education has most frequently been the domain of the school for the deaf. We encourage schools to continue their on-going groups and to form new groups which use these materials. We also encourage groups of parents who are unable to attend sessions at their child's school to gather in homes or local public schools to view and discuss these materials. It is also possible that these materials could be used with a local public health nurse or hospital administrator with groups of siblings or grandparents. Some of the reasons for the choice of the transparency form were the portability of the materials and projector and the availability of overhead projectors at local schools and rehabilitation centers.

Any parent of a deaf child should be encouraged to join a group with other parents. It is the parent of a very young deaf child who most frequently seeks out other parents. And it is the parent of an adolescent deaf child who has had the experiences and the most blatant examples of communication problems and successes. Parents of children of all ages should be encouraged to learn from each other. A group of parents at a conference held to discuss the utilization of these materials strongly suggested the benefits to be derived from mixing parents with children of different ages. Through this mixing, parents learned about the joys and problems which occurred as the child matures and about the many successful methods for communicating during this maturation process.

There are varying methods of education used at schools for the deaf. There are diverse assumptions which underly the philosophy of schools and the parents of children who attend these different schools. We encourage regional groups to form and talk about these assumptions, about their children and about the education of the deaf.

Diversity in education, profession, life-style, age, sex, etc. will
lead to more varied approaches to parent-child communication. The composition of the groups should be varied as to age, socio-economic status, sex, etc.

**Frequency:** The group should try to meet once a week for as many weeks as it takes to discuss the complete package of transparencies. These frequent meetings support group interaction and familiarity. They also give parents an opportunity to talk about their new behaviors and to get immediate feedback from the group about their efforts. Ideally, bonds will be formed which could influence groups to continue after the completion of the transparency series.

**Sequencing:** We suggest chronological or thematic sequencing of the visuals. The visuals begin with the parents prior to the birth of the child and end with the deaf child's late adolescence. The thematic approach gives parents of very young children a chance to look at their present experiences and a chance to look at and plan for the future. The parents of older children can analyze their present behaviors and discuss effective and less effective handling of past concerns. Thematic sequencing entails selecting those visuals relevant to specific themes and designing sessions based on those themes.

**Checklisting:** In order to give the facilitator and the parent feedback on changes in their communication behaviors, facilitators might want to have the parents checklist suggested behaviors. Parents should choose one or several of the behaviors listed in Part IV for each of the transparencies. After choosing the behavior(s), convert it (them) into a question which
asks for a frequency count. Here is an example:

<table>
<thead>
<tr>
<th>Question #</th>
<th>19</th>
<th>Week #</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many times today did you suggest activities that you thought your child might like? (e.g. going to library, visiting a museum, baking cookies, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

A sample checklist form is provided in Appendix I. Facilitators should remove this appendix form and duplicate it so that parents can perform the checklisting.

**Leadership:** The successful implementation of the transparencies relies on the group leader. This leader is responsible for the formation, facilitation and evaluation of the group. This individual, the leader, relies on the facilitator's manual and has access to the transparencies prior to the group sessions. The group leader is responsible for making maximum use of the skills of the group members and the concerns evoked by the transparencies. The leader performs certain facilitating functions:

1. assessing the needs of the group and the individuals within the group;
2. verbally stating the objectives of the group sessions and the transparencies;
3. directing the interaction during the sessions;
4. listening to the concerns raised by parents, making some specific suggestions, and encouraging and reiterating parent suggestions for behaviors which will improve parent-child communication;
5. making formative and summative evaluations of success based on checklists of parent behaviors and verbal inquiry into reactions of parents;
6. maintaining the group: arranging, convening and supporting the continuity of group efforts;
7. choosing a sequencing method (chronological or thematic);
choosing an appropriate leadership style, considering the balance of task (discussing the transparencies, the issues and the behaviors generated by the transparencies) and relationship ("how are you feeling today" kinds of questions) needs; and

adapting leadership style, selection of transparencies, specific behavior suggestions, etc. to immediate and unexpected needs expressed by the group.

preparing and planning for each of the sessions with the parent group.

In most schools for the deaf, parent groups are led by psychologists, guidance counsellors, school administrators, and teachers. We encourage psychologists, counsellors, teachers, and administrators to use these materials as the basis for their parent education programs. And while encouraging the traditional leadership to make use of these materials, we are also providing a very specific instruction manual to aid parents in using the transparencies.

A parent who is aware of the possible problems and solutions for hearing parents and deaf children can take on the group leadership. The parent is a member of the school community who is very able to create an environment which leads to the sharing of concerns and solutions. Parents will talk about how they feel and what they do about these feelings. Often the parent who has already analyzed his reactions and behaviors will be able to work with those parents who have not yet gone through that analysis. Certainly, parents with a knowledge of deaf education, group leadership, and their own reactions to being the parents of a deaf child, should be encouraged to facilitate these materials.
The likelihood of selecting an effective facilitator will be increased if the selection is made by considering the following 9 questions:

1. Do parents like to talk to this person?
2. Does this person spend noticeable amounts of time in talking with parents?
3. Does this person like to work with groups?
4. Would this person choose to invest time planning and implementing the NRMCD program?
5. Is this person familiar with operant procedures?
6. Has this person read the facilitator's manual and seen the visuals and responded positively?
7. Is this the best person to perform this function?
8. Should a parent implement this program? Should it be a parent-educator team?
9. What kind of teacher-parent interrelationships can be developed out of this program.

This selection procedure should aid in assuring the appointment of a facilitator most likely to have something to offer the parents and thus, able to maintain parent participation.

**Parent Involvement:**

Once upon a time in a land very near to every school for the deaf, there was a guidance counsellor. She had been spending much of her time planning a parent education program. She arranged for films and speakers. She arranged for doughnuts and coffee. She sent friendly invitations to over 150 parents. She decorated the auditorium for the occasion. And she stood at the door and greeted seventeen parents as they entered for the meeting. Seventeen parents. One hundred and fifty invitations.

What could she have done to broaden parent involvement and parent education at her school? What can you do?
1. Create an environment which is comfortable for parents. Facilitators should remember that a non-judgmental and non-threatening set of leadership behaviors will increase the parents' comfort. Avoid imperative statements. Avoid giving parents the "correct answers."

2. Involve parents in planning the agenda of parent meetings based on their assessment of parent needs.

3. Notify parents well in advance and re-notify them a few days prior to the meeting. Use several media for notification: newsletters, personal letters, phone calls, local newspapers, posters at school and bus pick-up points, local radio and TV spot announcements.

4. Involve parents in decisions about agenda and times for meetings.

5. Involve parents in some kind of tangible activity or task which might be of value to other parents, e.g. a list of responsive and helpful otologists in the area.

6. Arrange for child care facilities at the site of the group meetings.

7. Provide transportation to and from meetings for those who need it.

8. Avoid asking for money from parents who are attending these sessions.

9. Respond immediately to the needs and concerns expressed by parents.

10. Suggest that parents practice communication behaviors during the week and help them use checklists to evaluate their success.

11. Arrange special sessions which include other members of the family, e.g. a grandparent's meeting or a sibling session.

12. Enjoy the time you spend with the parent group. They will sense this enjoyment and it will be shared by them.
These transparencies are meant to stimulate differing and often controversial and ambivalent reactions. The reactions to the transparencies, in terms of what the parents see going on and what the parents think should be going on, will vary with the experiences and expectations of the different individuals in the group. While there are no correct answers to the visuals, and while there are no correct interpretations to the visuals, there are some appropriate and important discussion topics which the visuals should evoke. This discussion should lead to suggestions for successful communication skills.

The implementation section of this manual treats each transparency individually and chronologically.

The following information is provided for each transparency:

I. Description of the Visual: A straightforward identification of the characters, roles and setting in the particular transparency. Occasionally, a response to the leader's "What's going on here?" or "What do you see happening?" will differ from our description. Base your group discussion on this kind of difference; find out why the parent sees a different situation and what kinds of things this particular parent has done in this situation. The description in the manual will inform the leader of our intentions. Still, with our intentions in mind, it is most important for the leader to follow up on unique parent reactions.

II. Suggested Questions and Activities: Frequent use of these transparencies had led to the compilation of useful questions and activities. The usefulness of the questions and activities is based on the likelihood of their evoking
a discussion of and suggestion for new and improved communication behaviors. These questions and activities are "suggested"; the successful facilitator will be able to adjust our suggestions to the unique needs of the individuals in the group. No facilitator will ask every question or carry out every activity. Base your choices on needs expressed by group members and on our and your objectives for changes in the skills of the parents.

III. Subjects for Discussion and Parent Reactions: Most of the visuals evoke several possible subjects for discussion. These subjects revolve around the universals in all parent-child relationships and the special concerns raised by the introduction of deafness into that relationship. Some of the topics which are touched on in the visuals are sibling relationships, leisure time activities, jealousy, physical closeness, physical punishment, career and social expectations, and parent-peer-community interaction. This portion of the implementation section will give the facilitator a list of the subjects which the visuals should evoke. This portion will also give some sample parent reactions and ideas about what to do with these reactions.

IV. Parent Behaviors: Parents of deaf children need to talk to each other concerning their feelings about their deaf child and their behaviors with that child. This kind of discussion should stimulate shared support and suggestions from the group. There are some very specific behaviors which parents can adapt to facilitate communication between themselves and their deaf children. This portion makes those suggestions. Facilitators should make suggestions and they should encourage parents to suggest their successful techniques to the other parents. After spending a session discussing transparencies and making specific communication suggestions, the facilitator should open the next session by referring to the last session's list of communication
behaviors. Use this list as a checklist for measuring the changes in parent skills from session to session. Specifically, ask the parents about the new techniques they have tried and the results of these efforts. The problems that parents have in implementing new methods for dealing with their children should be discussed and worked out within the group.

Facilitators might want to reproduce the suggested lists of behaviors and give this list to parents for easy referral and reminder in their homes. With this reproduction of the list of parent communication behaviors in hand, the parents can choose 2 or 3 or 4 specific behaviors upon which they would like to concentrate. These selected behaviors should then be re-stated in question form.

e.g. From Transparency # 39, IV (2): The parent discusses dating and friendship with the deaf adolescent. Change to: How many times today did you discuss dating or friendship (or related topics) with your deaf adolescent?

These questions can then be placed in the checklist form on Page 11. Once parents are checklisting, the leaders can then help them look at and learn from their progress. A sample checklist form is provided in the Appendix. Leaders can duplicate these forms and make them available to the parents for their record keeping.