RECORDING PLAYROOM ACTIVITIES OF
YOUNG HANDICAPPED CHILDREN

by

MABEL MARIE SLATER
B.H.E. University of British Columbia, 1949
Dip. C.S. University of Toronto 1950

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Department

of

EDUCATION

We accept this thesis as conforming to the
required standard

THE UNIVERSITY OF BRITISH COLUMBIA

April, 1965
In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the Head of my Department or by his representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Education

The University of British Columbia,
Vancouver 8, Canada

Date April 50, 1965
ABSTRACT

This study was concerned with the recording of observations of preschool activities of young handicapped children.

Statement of problem

Is it possible to develop a useful, concise and comprehensive recording instrument that can be used in making observations of the growth and development of young children in preschool settings at special education centres?

A record form was developed with a five point rating scale for a checklist of twenty-one items with some anecdotal information. This recording instrument was used by teachers in four preschool special education settings to assess the growth and development of the young child over a period of time.

The material was evaluated in terms of:

a) Adequacy for description of the child and his development.

b) Adequacy for evaluation of and planning for the programme.

c) Opinions of preschool teachers and other professional people.

d) Quantitative information provided by the records were studied by means of profiles.

The results showed that the time limitations imposed on most teachers of young handicapped children would make it impossible for them to complete the extensive records developed in earlier studies.

A recording instrument with as few as twenty-one items could be
used to provide an adequate description of a young handicapped child. Two consecutive periodic assessments showed development. Programme planning and evaluation was facilitated by using the record form to note areas of strength and weakness. Averages of group ratings showed characteristics of specific handicaps.

Although a recording instrument developed in one centre may not be used adequately without adaptation in another centre, the kind of record used in this study would be useful.

The record used in this study was divided into specific areas of developmental growth i.e. communication, social participation, imaginative and creative expression. Items significant to the specific handicaps could then be selected. The five point rating scale could be applied to all items. By utilizing basic elements such as these a useful, concise and comprehensive system of recording that contains a great deal of flexibility could be developed.

The contribution made by the preschool in the field of special education cannot be measured and evaluated until those people working in this area realize the importance of recording their observations of the growth and development of the children with whom they work.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION AND PROBLEM</td>
<td>11</td>
</tr>
<tr>
<td>The Problem</td>
<td>12</td>
</tr>
<tr>
<td>Statement of the problem</td>
<td>12</td>
</tr>
<tr>
<td>Purpose of this study</td>
<td>12</td>
</tr>
<tr>
<td>Plan for study</td>
<td>13</td>
</tr>
<tr>
<td>Definitions</td>
<td>13</td>
</tr>
<tr>
<td>Records and Evaluation</td>
<td>15</td>
</tr>
<tr>
<td>Why records?</td>
<td>15</td>
</tr>
<tr>
<td>How is information obtained for records?</td>
<td>19</td>
</tr>
<tr>
<td>What kind of records?</td>
<td>22</td>
</tr>
<tr>
<td>What are the criteria for records?</td>
<td>25</td>
</tr>
<tr>
<td>Why special education during the preschool years?</td>
<td>27</td>
</tr>
<tr>
<td>Organization of Thesis</td>
<td>30</td>
</tr>
<tr>
<td>II. LITERATURE REVIEW</td>
<td>32</td>
</tr>
<tr>
<td>Research with Handicapped Preschool Children</td>
<td>32</td>
</tr>
<tr>
<td>Evaluating Development in Preschool Children</td>
<td>33</td>
</tr>
<tr>
<td>Evaluation of Exceptional Children</td>
<td>35</td>
</tr>
<tr>
<td>Preschool Education</td>
<td>36</td>
</tr>
<tr>
<td>Special Education in the Preschool Years</td>
<td>37</td>
</tr>
<tr>
<td>III. DEVELOPMENT OF THE RECORD AND PROCEDURE FOR TESTING</td>
<td></td>
</tr>
<tr>
<td>RECORD</td>
<td>41</td>
</tr>
<tr>
<td>Preschool Records</td>
<td>41</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>PAGE</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Public school kindergartens</td>
<td>42</td>
</tr>
<tr>
<td>Nursery schools</td>
<td>42</td>
</tr>
<tr>
<td>Laboratory schools</td>
<td>43</td>
</tr>
<tr>
<td>Special education centres</td>
<td>45</td>
</tr>
<tr>
<td>Common Features</td>
<td>46</td>
</tr>
<tr>
<td>The Rating Scale Used for this Study</td>
<td>47</td>
</tr>
<tr>
<td>Pretests</td>
<td>53</td>
</tr>
<tr>
<td>The Present Record Form</td>
<td>54</td>
</tr>
<tr>
<td>Routine Self Care</td>
<td>56</td>
</tr>
<tr>
<td>Language</td>
<td>56</td>
</tr>
<tr>
<td>Social Participation</td>
<td>59</td>
</tr>
<tr>
<td>Play Activities</td>
<td>62</td>
</tr>
<tr>
<td>Emotions</td>
<td>68</td>
</tr>
<tr>
<td>Procedure for Use of the Record</td>
<td>70</td>
</tr>
<tr>
<td>The children</td>
<td>71</td>
</tr>
<tr>
<td>Procedure</td>
<td>71</td>
</tr>
<tr>
<td>Summary</td>
<td>73</td>
</tr>
<tr>
<td>IV. RESULTS AND ANALYSIS OF THE RECORD FORM</td>
<td>74</td>
</tr>
<tr>
<td>Comments and Suggestions from Directors</td>
<td>74</td>
</tr>
<tr>
<td>Total Number of Record Forms Used in Study</td>
<td>76</td>
</tr>
<tr>
<td>School A - Physical Handicaps</td>
<td>77</td>
</tr>
<tr>
<td>The records</td>
<td>77</td>
</tr>
<tr>
<td>The school situation</td>
<td>77</td>
</tr>
<tr>
<td>The teacher</td>
<td>77</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>PAGE</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>School B - Physical Handicaps</td>
<td>79</td>
</tr>
<tr>
<td>The records</td>
<td>79</td>
</tr>
<tr>
<td>The school situation</td>
<td>79</td>
</tr>
<tr>
<td>The teacher</td>
<td>80</td>
</tr>
<tr>
<td>School C - Hearing Handicaps</td>
<td>81</td>
</tr>
<tr>
<td>The records</td>
<td>81</td>
</tr>
<tr>
<td>The school situation</td>
<td>82</td>
</tr>
<tr>
<td>The teacher</td>
<td>82</td>
</tr>
<tr>
<td>School D - Intellectual Handicaps</td>
<td>83</td>
</tr>
<tr>
<td>The records</td>
<td>83</td>
</tr>
<tr>
<td>The school situation</td>
<td>84</td>
</tr>
<tr>
<td>The teacher</td>
<td>84</td>
</tr>
<tr>
<td>Analysis of the Record Forms</td>
<td>85</td>
</tr>
<tr>
<td>Individual records and profiles</td>
<td>85</td>
</tr>
<tr>
<td>Single assessments</td>
<td>86</td>
</tr>
<tr>
<td>Double assessments</td>
<td>93</td>
</tr>
<tr>
<td>Short term assessments</td>
<td>98</td>
</tr>
<tr>
<td>Average Scores</td>
<td>101</td>
</tr>
<tr>
<td>School A - Physical handicaps</td>
<td>101</td>
</tr>
<tr>
<td>School B - Physical handicaps</td>
<td>108</td>
</tr>
<tr>
<td>School C - Hearing handicaps</td>
<td>111</td>
</tr>
<tr>
<td>School D - Intellectual handicaps</td>
<td>113</td>
</tr>
</tbody>
</table>
vii

CHAPTER

V. DISCUSSION AND RECOMMENDATIONS ................. 119
Development of the Instrument ............................ 119
Recording Observations of Growth and Development ........ 121
Programme Evaluation and Planning ....................... 125
Short Term Assessment ...................................... 126
Usefulness for Communication ............................. 127
Recommendations ........................................... 130
Research .................................................... 131
Summary ..................................................... 132

BIBLIOGRAPHY ............................................... 137

OTHER REFERENCES ........................................... 141

APPENDIX A. Sample Record Form ......................... 144
Manual of Instructions .................................... 145

APPENDIX B. Subjects - Information from Record Forms .... 152
Schools Participating in Study ............................ 154
**LIST OF TABLES**

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Individual, Totals, and Average Ratings of Development</td>
<td></td>
</tr>
<tr>
<td>of Children with Physical Handicaps Attending School</td>
<td></td>
</tr>
<tr>
<td>A in the Junior Group</td>
<td>102</td>
</tr>
<tr>
<td>II. Individual, Totals, and Average Ratings of Development</td>
<td></td>
</tr>
<tr>
<td>of Children with Physical Handicaps Attending School</td>
<td></td>
</tr>
<tr>
<td>A in the Senior Group</td>
<td>105</td>
</tr>
<tr>
<td>III. Individual, Totals, and Average Ratings of Development</td>
<td></td>
</tr>
<tr>
<td>of Children with Physical Handicaps Attending School</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>109</td>
</tr>
<tr>
<td>IV. Individual, Totals, and Average Ratings of Development</td>
<td></td>
</tr>
<tr>
<td>of Children with Hearing Handicaps Attending School</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>112</td>
</tr>
<tr>
<td>V. Individual, Totals, and Average Ratings of Development</td>
<td></td>
</tr>
<tr>
<td>of Children with Intellectual Handicaps Attending</td>
<td></td>
</tr>
<tr>
<td>School D</td>
<td>116</td>
</tr>
</tbody>
</table>
LIST OF PROFILES

PROFILE

1. Rating of Level of Development of
   Subject M.A. - Single Assessment .............................. 87

2. Rating of Level of Development of
   Subject L.B. - Single Assessment .............................. 89

3. Rating of Level of Development of
   Subject V.C. - Single Assessment .............................. 91

4. Rating of Levels of Development of
   Subject J.A. - Double Assessment .............................. 94

5. Rating of Levels of Development of
   Subject W.D. - Double Assessment .............................. 96

6. Rating of Levels of Development of
   Subject J.B. - Short Term Assessment .......................... 99

7. Average of Ratings of Development of Children
   with Physical Handicaps Attending School A
   in the Junior Group ............................................ 104

8. Average of Ratings of Development of Children
   with Physical Handicaps Attending School A
   in the Senior Group ............................................ 107

9. Average of Ratings of Development of Children
   with Physical Handicaps Attending School B ........................ 110

10. Average of Ratings of Development of Children
    with Hearing Handicaps Attending School C ........................ 115
11. Average of Ratings of Development of Children
   with Intellectual Handicaps Attending School D
CHAPTER I
INTRODUCTION AND PROBLEM

A persistent problem in the field of special education is that of reporting on the growth and development* of young children in a preschool setting. This problem is demonstrated in several ways. The first is in reporting to other members of a multidisciplinary treatment team —

"And how is he (the child) doing in the nursery school?"

It is not easy to give a comprehensive answer, in terms that are meaningful to all the professions involved. A description of what a child can do does not describe progress.

Another problem, an outgrowth of the first, is that of putting this information (on growth and development) in a form suitable for cumulative histories.

The problem of programme planning for the individual child and for the whole group, is also involved. What are the performance goals for each child? What are the goals for the whole programme and how can these goals be reached? The beginning of a solution to these problems may be in an adequate system of records.

The need for a quantified system of recording the growth and development of handicapped preschool children was expressed by L.J. Linch. He said that some quantitative, as well as qualitative information on results in special preschool groups is needed.

* Growth and development - This phrase is used in a general sense and includes physical, social-emotion, intellectual etc. in its scope.
I. THE PROBLEM

Statement of the problem

Is it possible to develop a useful, concise and comprehensive recording instrument that can be used in making observations of the growth and development of young children in preschool settings at special education centres?

In special education centres with several contributing disciplines, records often become very voluminous. Therefore, recording must be concise. To provide information for adequate evaluation of the child and the preschool programme, the recording must be comprehensive. To show development, or lack of it, in the child, a quantitative measure must be established. However, since growth is individual and cannot be entirely reduced to figures, there must also be room for qualitative information. Most important of all, the record must meet the needs of the people working with the child. The record must be useful.

Purpose of this study:

1. Develop an instrument that could be used to record the growth and development of preschool children in special education centres.

2. Use the recording instrument in several special education centres to see if it met the above-mentioned criteria of usefulness, conciseness and comprehensiveness.
Plan for study

The data gathered is presented as

1. Opinions from medical directors regarding the usefulness of the recording instrument.

   Opinions of preschool staff using the recording instrument regarding its usefulness.

2. The ways in which the instrument was used.

   a) For description - of the child - activities, abilities.
      - of the development of the child - when used more than once, over a period of time.
   b) For programme evaluation and planning - for the individual child - Does the programme need to be changed to aid development? What is the next step for this child? How can it be achieved?
   c) To make the quantitative information provided by the record form more significant records are presented as profiles:
      - as individual profiles.
      - as averages for school groups.

II. DEFINITIONS

Handicapped child (exceptional) - The child

who deviates intellectually, physically, socially, or emotionally so markedly from what is considered normal growth and development that he cannot receive maximum benefit from a regular school program and requires special classes or supplementary instruction and services. (Cruickshank & Johnson p.3)
This study does not include the intellectually gifted in this definition.

Special education - Education of handicapped children (as defined above).

Special education centre - A centre for the education of handicapped children (as defined above).

Preschool - That part of the programme of a special education centre, apart from the therapies and medical treatment, set up for children too young and/or immature to benefit from an academic school programme. The chronological age range is wider than for non-handicapped children. The youngest is about 3 years and the oldest about 7 years. It includes nursery school (junior groups) and kindergarten (senior groups). The terms preschool, nursery school and kindergarten will be used interchangably unless otherwise stated.

Record(s) - This study used this word as both a verb ("...used to record..." p. 12) and as a noun ("...records often become..." p. 11).

v - register, put in writing or other legible shape, represent in some permanent form.

n - Piece of recorded evidence of information, account of fact preserved in permanent form or document. (Concise Oxford Dictionary 4th Edition)

Cumulative records (case history) -

Cumulative records - A cumulative record is one maintained for an individual pupil or client over a period of years, with
successive additions to the record at relatively frequent
intervals, ....

A complete picture of the child as a unified personality
depends largely on the details found in a cumulative...
record system. (Good & Scates pp. 762, 763)

III. RECORDS AND EVALUATION

Why records?

This question, when asked of special education for the handicapped
preschool child, can be approached in at least two ways:

A. Preschool children - The young child cannot tell you in words
why he acts the way he does. If the adult is going to try to find out,
the child must be observed in details of how, when and what, noted and
recorded. Gathering clues from the child's activities will lead to
understanding. Cohen and Stern (p4) express it this way - Young children

Think with their hands (they touch to find out) - socialize
with their feet (stamping and kicking)... - think with their
feet (What happens to a worm?) and socialize with their
hands (What will happen if I touch him in the eye?)

Children communicate with us through their eyes, their voices,
their bodies and their gestures.

Recording of their activities help us not only to see a child as
he is but helps us remember what he was.

B. Education - If the contribution made by the preschool to the
total educational programme is to be measured then records must be kept
and used. Tyler has outlined purposes of records in an educational
system. Some of these are that:

1. They furnish data about the individual pupil essential for
guidance. This implies a comprehensive evaluation of all significant aspects of the pupils accomplishments. It should show progress and difficulties.

2. They provide a periodic check which gives direction to programme improvements.

3. They can serve as a sound basis for public relations.

These purposes are not only applicable to educational systems for the non-handicapped. They are also applicable to educational systems for the handicapped.

Education for the handicapped preschool child is usually only a part of the total programme for him. Dependent on the specific handicap there may also be physiotherapy and/or occupational therapy, and/or speech therapy and others. There are records kept on the child's development in each of these areas. The child's medical history, the reports of psychological tests, and the reports on the family and home are also kept. Together they comprise the cumulative record. The significant growth and development which goes on in a preschool programme should be considered. Records must be kept.

But what is to be recorded? There is one aspect of the child's growth and development which cannot be fully noted by the many specialists. (The word "fully" is used because it is a part of their records. No area of growth and development can be isolated from another.) It is the way in which the child actually uses his abilities and skills in his own world - for example the difference between speech and communication. At
the special education centre that world is the preschool - a world created to meet the needs of the child.

It is a record of living in the nursery school that must be made. And it can only be done by careful observation of the child and a recording of his activities.

How can a record of preschool activities help in guiding the child? To continue with the illustration of speech and communication already used: an adequate record should include information of a child's ability to communicate with the children and adults around him. Over a period of time the records should show an increase, not only in the amount of communication, but also an increase in the vocabulary used by the child. If there has been no increase in a six month period then some questions should be asked of the child's programme. Is he being given opportunities to speak or to communicate with others? Are his needs being so efficiently anticipated that he has no need to communicate? Are the materials or toys with which he plays so simple they present no problems to him? Is the adult taking time to "unravel" his gestures and sounds? Is he making good gains in other areas of development? These are the kind of questions which could be asked of a child's individual programme if adequate records were kept and areas of need could be shown. Depending on the answers, appropriate changes could then be made in his programme.

An evaluation of the total programme can also be made with periodic
checks of the individual records. Ask the question "What are we trying to do in the school?" If the objectives of the preschool are clear the records will show if they are being achieved.

For example - One of the objectives of the preschool could be stated this way - "To provide opportunities to increase intelligible communication". The records of each child should show, from one time to another, if there has been an increase in intelligible communication. If there has been little or no increase with most of the children then the programme must be critically examined to see if there are enough opportunities provided for communication. Are the adults so busy caring for the physical needs of some of the children that they have no time to listen to the others in the group? Are the adults so busy telling the children what to do there is no need for the children to talk? Are the children being provided with enough materials to provide incentive for conversation? These are only a few of the questions that could be asked of a programme if records showed little or no increase in intelligible communication amongst a number of the children.

The point of using records as a basis for public relations (Tyler) can be paralleled with one given by Olson as a means of communication between professional workers. This is most important in a multidisciplinary setting. The speech therapist needs to know more than "He uses gestures instead of vocalizing." The physiotherapist will need to know if the walking ability demonstrated in her presence is consistently carried over to the playroom. But more than this is the need to show
that the preschool is a learning situation, not just in social-emotional development, but in all other areas. And it can only be done if the broad role of the preschool is adequately reported.

Another use for records is given by Olson. He says that they can be used as a basis for a body of knowledge for study and research purposes. If records are to be used for these purposes there has to be some standardizing in the form of recording, and in the use of terms. Qualitative information is not enough. Quantitative information is needed.

In summary, records of the growth and development of handicapped children in the preschool can be used for several purposes. The four that have been discussed are -

1. For individual guidance and evaluation.
2. For programme planning and evaluation.
3. For communication.
4. For study and research.

How is information obtained for records?

Having provided some reasons for keeping records the next question will be - how is the information on growth and development to be obtained?

It has already been pointed out that a preschool child cannot explain or report on his own activities. The adult must observe the behaviour of the child. What the child does, not what he thinks or feels, is what is noted or recorded.
Methods of observation depend on the needs of the observer and on the physical set-up of the situation. Certainly there are some basic guide lines but the student, the research worker and the teacher will each have different reasons for observing.

For the teacher Cohen and Stern says that:

The teacher must literally snatch time to record observations. Cards, pads etc. should be kept in pockets and on shelves for brief notations.

"Be casual and unobtrusive about it all." (p. 7)

Always include date, name of child and the setting for the action.

Take records at different times of the day.

For any observer "Observation" must have direction. If it doesn't the attention of the observer will be attracted by certain qualities of behaviour which may not be important.

The child who is constantly moving from one activity to another will attract more attention than the child who works with just one kind of material.

The child who shouts, whines or cries is more noticeable than the quiet child.

The child who is strikingly different in size, behaviour, or dress will attract more attention than other children in the group.

The observers needs of the moment will cause certain children
or activities to be more attractive than others. For example, the observer with a headache is more apt to choose a quiet child or a quiet activity to observe.

The observers own interests will influence the choice of activity for observation.

So before observation begins there must be a plan. The observations must be organized. (Methods of recording observations will be discussed later).

The process of observation may be interfered with by several errors. Observations, even when directed, can be interrupted by more attention getting activity, so that some information may be omitted.

Observation, may be incomplete because the observer was unable to note all of the activity, (e.g. Portions of conversation that were carried on in very low voices,) or failed to note details of the setting for the action (e.g. 'Tom his Mary' is meaningless unless additional information is provided. 'Tom hit Mary when she grabbed his cap.' gives a better picture).

Error may arise because of faulty memory when reporting is delayed.

It is important to remember that errors will arise. Allow a margin of safety by validating observations with further observations, before acting. (Almy, 1955)

Although only one method of observation, that of noting details
of external behaviour, can really be used with preschool children, the
needs of the observer will determine the direction or focus that the
observation will take.

For any observer 'observation' must be directed. If it isn't, the
attention of the observer will be taken up by some kinds of activities
and others, equally important, will be overlooked. Observations must be
validated by further observation before interpretation of the activities
or behaviour are useful.

Observation must be organized. The organization will be deter-
mined by a predetermined method of recording.

What kind of records?

Records of the growth and development of handicapped preschool
children must be kept if the needs of the children and the special
education centre are to be met. (Tyler, Olson).

The next question is "What kind of records are needed?" This will
be determined by the needs of the school, the teacher, the student
observer, etc.

There are several methods described and recommended by authorities
in the field of education. Some of these are more useful in the preschool
than others.

1. The diary (Almy, 1959, Cohen & Stern, Christianson et al.,
Strang). This involves a detailed account of a child's activities
for a specific length of time. It is the most difficult kind of recording
to do. But with a little planning it can be objective and include a fair
amount of detail. It should create a picture of the child as he is "now", at the time of recording.

2. The anecdote (Almy, 1959, Cohen & Stern, Christianson et al., Isaacs). This method involves accounts of specific incidents of behaviour. Pertinent and interesting behaviour is quickly recorded as it occurs. Taken over a period of time it will show growth and development in a particular child.

3. Selective (Blatz et al., Isaacs, Christianson et al., Strang). This is similar to the anecdotal method but is concerned with a particular aspect of behaviour. It may be the type used for research projects.

4. Snapshots, movies, recordings etc. (Almy, 1959). These are a very accurate means of recording behaviour. Their use is increasing but cost is the chief drawback. The time needed for rerunning of films and tapes must also be considered.

5. Checklists (Almy, 1959, Thomas). This could be a list of all toys and materials used by one child or the number of times certain materials are used. It is marked to indicate presence or absence of what is being observed.

6. Rating methods (Almy, 1959, Wrightstone et al., Thomas, Isaacs, Strang). Characteristics or activities are arranged on a basic scale. Check lists and rating scales help to organize the recording of observation. Both are basically dependent on observation. They give the teacher an overview of the group and give perspective in studying and understanding the individual child. The methods are similar. The checklist is a list
of the characteristics or activities to be noted and the rating scale has characteristics or activities arranged in a scale of values.

The usefulness of these methods depend largely on how well the teacher has observed the children.

Rating scales seem to work best for judging behaviour which is easily observable and demands little from the rater in terms of interpretation (Thomas).

Thomas gives some uses for rating scales -

a) Diagnosing weak areas in the student's (child's) development.

b) Providing guidance in strengthening these areas.

c) Reporting student's (the child's) progress to the student, their parents and administrators.

Point c., in application to the field of special education, could be extended to include medical and treatment personnel.

7. Sociometric measurement (Christianson et al.)
These are used to study social development of the child and is a type of selective method (3).

A nursery school in a special education centre will develop one or more of the above methods to show up the emphasis of the centre and the specialized needs of the child - physical handicap, sensory handicap, mental handicap, long term treatment or assessment. It will become part of the cumulative history kept on each child.
The choice of methods of recording observation will be determined by the needs of the centre and by what the observer finds most efficient. The ultimate test of any record system is its usefulness to the teacher and any other person(s) who may consult it. Unless records are consulted and used to improve the children's development there is no reason for keeping them.

What are the criteria for records?

No matter what type of recording is utilized there are certain characteristics which are essential to good recording. The following is one analysis of the essential attributes (Good & Scates).

Accuracy and objectivity

Conciseness and clarity

Ease of reference and visibility

Uniformity and "up-to-dateness"

Provision should also be made for anecdotal information, summaries, interpretations and treatment.

Accuracy and objectivity

To be objective and accurate in reading and recording behaviour is difficult. Objectivity can only be relative. It has been said, "What we perceive 'objectively' may be, to a large degree a projection of one's own subjective state and this tells more about oneself than about the people whom one observes." (Almy 1955 p.7)

To validate ones observations, further observation and compar-
ison to another observer are important. Data must be objective to make professionally valuable interpretations (Almy, 1955).

To obtain an accurate picture of a child every aspect of child development must be covered and yet it must be selective or the record will show only behaviour that is attention catching or will be so filled with unimportant details that there will be no diagnostic value to them.

Conciseness and clarity

Conciseness is important because to the teacher time both to record and to read are limited. Yet there must be a balance between brevity and clarity. One author suggests the use of a Thesaurus if the recorder does not have a good working knowledge of descriptive terms (Cohen & Stern). Checks and symbols are a devise suggested by another (Blatz et al.) although if the symbol does not apply to a previously described activity the brevity would make it very inadequate.

Ease of reference and visibility

Again, these characteristics contribute to efficiency both in recording and reading of records. If the spacing and arrangement are planned, summarizing and analysis will be facilitated (Blatz et al.).

Uniformity and "up-to-dateness"

Uniformity of spacing and arrangement will make the record much more useful for study and research purposes. Uniformity of terminology will contribute to clarity and understanding. Uniformity in long term (cumulative) records will ensure against omissions or errors.
Provision made for anecdotal information etc.

Although there are many occasions when detailed information is unnecessary, anecdotal records provide much information not available through any other means. Recording behaviour is recording growth. Many "stills" are needed before a common movement is visible (Cohen & Stern).

All the information contained in records may not be needed for every occasion but well balanced records can be analysed in many ways to meet needs as they arise. Effective recording is dependent on careful observation and discriminative selection. Good recording displays accuracy, objectivity, clarity and visibility.

Why special education during the preschool years?

The nonhandicapped, average preschool child learns a great deal. He learns many physical skills as his body grows and matures. He also learns that characteristically human ability of combining speech and communication. He learns that the word "orange" may mean something to eat or that it may be a colour; he learns that "chairs" can be soft or hard, big or little, white, brown or any other colour. And so on. The many skills and knowledge, particularly the ability to handle abstractions, of the average six year old depend on broad experiences in the preschool years (McV Hunt).

The handicapped preschool child does not have access to the environmental experiences of other children. The crippled child cannot run outdoors to feel the first snowflakes; the blind child cannot see the colour of the orange; the deaf child cannot hear the warning growl
in the throat of an approaching dog. The child's mother must protect and "do" for him where another child is free and independent. The handicapped child is more likely to be too dependent on others to develop emotional maturity. He may be fearful, just from lack of "know-how", of things that should provoke curiosity and the desire to investigate. For these children, at this crucial time of life, the need for special services is very real.

The nursery school and kindergarten for handicapped children is part of these special services. It is a world set up especially for the young child.

The preschool programme for the handicapped child is essentially the same as for any other child. The handicapped child is more like than unlike other children but with special needs. The preschool programme for the handicapped child is more like than unlike other programmes but with special emphasis.

The chief difference between preschool programmes for handicapped and nonhandicapped children are emphasis and awareness. This emphasis and awareness can be made clearer by examining the attributes of a good nursery school (Millichamp) in terms of special education.

1. Respect - for the young child's person.

Regard, consideration, courtesy, attention - these are some of the synonyms for respect. The handicapped child has as much right as any other child to his share of these qualities. In the preschool setting he will be regarded as an individual with something of
value to contribute to society (that is, school life). He will not be ignored or laughed at because of his inadequacies.

2. Acceptance - of his childishness, his "unadulthood".

Also of his disabilities and limitations. In the preschool the handicapped child, may for the first time, be accepted just as he is - without weeping or sympathy, without overemphasis or an ignoring of his differences.

3. A place and an activity - suited to his way of being a person.

To the casual observer this will probably be the most noticeable area for differences. Special furniture (chairs and tables), special equipment (hearing aids and braces), special toys and special activities (to encourage the development of perceptual abilities and manipulative skills) are provided. The special need of each child will determine this. What suits one does not necessarily suit another.

4. Time - to live through each new way of being himself.

This is where the "awareness" is more obvious. In therapy sessions the young child is learning new skills and techniques. He must have the opportunity to integrate them into his living processes. Home, with its family needs, may not provide this time at the right moment. For the mother with several children to get off to school it is nearly impossible to give her handicapped child the time and attention necessary to assist him through his self-help efforts. In the preschool it is possible to give the necessary time and attention. The adult is aware of what he can do (knowledge gained from a therapist); the school
schedule is arranged so that there is time at the right time; the child
knows that honest effort (as well as results) is counted.

5. Adults - to give care, concern and control in support of his
efforts.

This is the crux of the whole situation. On the adults
in the preschool programme depend all the foregoing qualities. Enough
care, concern and control must be given to prevent the child from being
defeated before he starts. On the other hand there must not be so much
care, concern and control that the child never has an opportunity to
learn that failure can be a challenge. The adult must be aware of the
particular needs of each child to determine the type of care, concern
and control given.

The growing knowledge of development during the preschool years
makes preschool education vitally important for the child who is restricted
by a handicap.

IV. ORGANIZATION OF THESIS

The Introduction (Chapter I) to this study has asked a question.
By asking and answering several other questions which arise from this
main question the purpose of this study has been presented.

The Review of Literature (Chapter II) not only presents related
research it also presents some of the related literature that was used
for background information for this study: Special Education, and Pre-
school Education.
Chapter III presents in some detail the development of the structure of the recording instrument. It is based on the work of other researchers and on the experience of this writer.

The plan for the use of the record will be included in this chapter.

The results will be presented in Chapter IV and the discussion of these results and some conclusions will be presented in Chapter V.

This study attempts to demonstrate that it is possible to devise a concise and comprehensive instrument for recording observations of the growth and development of preschool children in special education centres. It also hopes to show that such an instrument will provide a useful basis

- for programme planning and pupil evaluation.
- for an increase in communication between professions.
CHAPTER II
LITERATURE REVIEW

Research studies of developmental changes in children are numerous but studies related just to preschool activities of handicapped children are limited. The research that is reviewed here deals with three groups of children.

1. Handicapped preschool children.
2. Non-handicapped preschool children.
3. Handicapped children in general. The research studies dealing with this last group have included record forms for rating developmental changes.

Also presented are reviews of a sampling of publications dealing with preschool education in general and more specifically, with preschool education for the handicapped child.

I. RESEARCH WITH HANDICAPPED PRESCHOOL CHILDREN

*Early Education of the Mentally Retarded* by S.A. Kirk, one of two research studies with handicapped preschool children, presents evidence that nursery school experiences for mentally retarded children do tend to raise the rate of development. Unfortunately it does not present any information regarding the means by which the children were evaluated in the nursery school situation. Personal communication with Dr. Kirk on this matter did not bring any further information.

Other works by S.A. Kirk (1961, 1962) include information on pre-
school groups for handicapped children but none of them present any information regarding methods of observation, recording and evaluation.

Another study with handicapped preschool children, *The Effects of a Preschool Programme upon Young Educable Mentally Retarded Children* Vol. II by M.H. Fouracre, F.P. Connor and I.I. Goldberg presents in great detail the curriculum developed during the study. The conclusions in this study show that the enriched environmental experiences of a preschool programme tend to raise academic school performance.

The curriculum guide, as presented in Chapter II is pertinent to this study. It was used

"a) for observing and rating the behaviour of the preschool children and

b) for program planning and evaluation." (p. 14)

The guide consists of 190 items, each with a five point developmental scale, with each point of the scale described in detail. This tool made "it possible to mark the position of an individual child,... on a readiness scale which functioned as a set of intermediate goals." (p. 14)

II. EVALUATING DEVELOPMENT IN PRESCHOOL CHILDREN

The purpose of a study by Agatha H. Bowley *"A Study of the Factors Influencing the General Development of the Child During the Pre-School Years by Means of Record Forms"* was to fill a need for some sort of record form which would serve as a basis for observation, especially
when untrained adults were assisting with preschool groups. The study emphasizes the importance of noting every aspect of the developing child and the inter-relationships of the various areas of development.

The record form consists of more than sixty items; most of them in the form of a question. Some of the questions are answered by "Yes" or "No";

  e.g. "Does he appear to follow a simple story easily?" (p. 102)

There is space provided for some anecdotal episodes:

  e.g. "Have any of the following characteristics been observed

      Temper tantrums

      Nail biting ...

      Note any if not included on list." (p. 103)

The answers are rated and the results obtained can be presented in the form of a profile. Profiles of the development of the children used in the study are included in the report.

Two other publications that deal specifically with evaluation of preschool children are *Observing and Recording the Behaviour of Young Children* by D.H. Cohen and V. Stern and "Written Records on Children" by Betty Shuey. The material in both of these publications again emphasizes the importance of obtaining a picture of the whole child. Cohen and Stern present in great detail different methods of recording observations of the different aspects of a child's activities in the nursery school situation. The need for accurate observation is emphasized.
III. EVALUATION OF EXCEPTIONAL CHILDREN

In "The Functional Classification of Exceptional Children", Ira Iscoe points out that exceptional children are so classified because they are different from normal children. He has selected four aspects of behaviour, (1. Visibility 2. Locomotion 3. Communication 4. Psychological Acceptance.) presenting each aspect with a five point rating scale, as follows:

1. No indication of exceptionality.
2. Slight indication of exceptionality - apparent to trained worker - not to layman.
3. Fairly obvious indication of exceptionality - observable to layman.
4. Moderately severe condition of exceptionality - easily noticeable to layman.
5. Severe condition, clearly manifested.

His suggestions for the use of this scale are:

1. Descriptive device for communication between professional workers.
2. Programme planning.
3. To judge congruence or discrepancy of child's ability.

The T.M.R. Performance Profile for the Severely and Moderately Retarded by Alfred J. DiNola, Bernard P. Kaminsky and Allan E. Sternfield, contains six major areas. These are:

Social behaviour 40 items
Self-Care 40 items
Communication 40 items
Basic knowledge 40 items
Practical skills 40 items
Body usage 40 items

These items are presented in a booklet with provision for rating each on a four point scale (0-4). The Performance Profile is devised from this rating. The items given suggest that the device is more suitable for rating children older than those in the preschool group - as defined for this study.

In order to assess behaviour of trainable, mentally retarded children L.F. Cain and S. Levine, developed a social competency scale. The scale was composed of four subscales: Self-help (23 items), Initiative-Responsibility (16 items), Social Skills (15 items), and Communication (18 items). There were four or five alternatives arranged in order of difficulty for each item. The items represent only a sample of social competency behaviours. This scale was used with children who were not less than five years of age.

IV. PRESCHOOL EDUCATION

In the past forty years a great number of publications dealing with preschool education have become available. For this study three books have been used to provide a basic background of information about preschool education.
The earliest of these is *Nursery Education* by W.E. Blatz, D. Millichamp and M. Fletcher.

It provides a theory of development through the preschool years and a description of the nursery school programme that has been built on this foundation.

Katherine H. Read, in *The Nursery School: A Human Relationship Laboratory*, places emphasis on the educational purpose of nursery schools and kindergartens. The similarity of their goals, to education in general, is shown by the development and structure of experiences in the curriculum.

The most recent of the three books, *The Nursery School* by H.M. Christianson, M.M. Rogers, and B.A. Ludlum reiterates the educational purpose of the nursery school. The following statement comes from the Foreword of the book and serves to justify early childhood school experiences for every child, handicapped or not.

"These early years may well prove to be the most fruitful for the kind of education which will determine the future of civilization." (p. xii)

V. SPECIAL EDUCATION IN THE PRESCHOOL YEARS

Mental Retardation

In the general field of special education there is not much specific reference to the preschool years. For the most part "school" starts at age six years and teaching methods seem to be chiefly related to reading, arithmetic, social studies, etc. An exception to this is
the material related to teaching the mentally retarded child of six years who is not yet ready for academic school subjects.

Curriculum Adjustments for the Mentally Retarded by Elsie H. Martins and Education of the Slow Learning Child by Christine P. Ingram both present material for teaching this group of children. There are others, because this age group is part of the regular school population, and must be taken care of educationally. No further attempt is made to cover this area of literature here. Both of these books give further references.

An article by H. Ikeda "Adapting the Nursery School Program for the Mentally Retarded Child" deals with school for preschool children, as defined in this study. And Chapter 7 of Kirk and Johnson's Educating the Retarded Child also deals with a programme for the young child.

Other literature related to preschool children with specific handicaps is:

Deaf and Hard-of-Hearing Children

Language for the Preschool Deaf Child by Grace Lassman.

Visually Handicapped Children

The Blind Preschool Child Berthold Lowenfeld ed.

Cerebral Palsied Children

"Adapting the Nursery School for the Multiply Handicapped Cerebral Palsied Child" by L.G. Yum.

Speech Handicapped Children

Slow to Talk by Jane Beasley.
Although the title of this last volume would seem to refer just to the speech handicapped child it actually has a much broader application. In it the learning situation is discussed from three aspects:

1. Motivation for learning comes from the child.
2. Learning comes from the child.
3. The most effective teaching procedures are based on meaningful wholes.

The material presented in all these books are apt illustrations of the following:

Exceptional children, defined as children with differences, have both the same needs as do their peers and some different needs pertinent to their type of exceptionality. (Cruickshank & Johnson p. 20)

Some of the general reference books on education of handicapped children also include special sections on the preschool years.

"The Education of Children with Impaired Hearing" Chapter 9, by Charlotte B. Avery and "The Education of Crippled Children" Chapter 11, by Frances P. Connor in Education of Exceptional Children and Youth both make special reference to the needs of the preschool years.

"The Preschool Area of Special Education" by Frances A. Mullen gives a general picture of the growing provisions being made for preschool children with special needs.

The research reviewed here in this chapter has been related to this study in at least one of two ways. They have been studies of developmental changes in preschool children and/or studies in which rating scales have been developed and used to record developmental changes.
Included in this review are also some of the publications which are especially directed to preschool education - for both handicapped and non-handicapped children.
CHAPTER III
DEVELOPMENT OF THE RECORD AND PROCEDURE
FOR TESTING RECORD

The need for an adequate system of recording playroom activities of handicapped preschool children has already been discussed. Methods of recording and criteria for records have also been presented.

This chapter will be a practical illustration of the foregoing information (Chapter I). Examples of some types of records that are made in various preschools will be presented. It will also present some of the limitations and requirements of preschool special education facilities and so show the practical criteria for the recording instrument used for this study. Conclusions from the pretest study which have effected the development of the final record form will be discussed. And the basis for the establishment of the recording instrument in its present form will be given in detail. Finally, the procedure for the testing of the use of record will be presented.

I. PRESCHOOL RECORDS

This chapter is chiefly a detailed presentation of the record form used for this study. Before going into it some methods of reporting on preschool children's behaviour and development in different settings will be examined.

When various records are compared the degree of variation and emphasis of each setting can be noted.
Public school kindergartens

In kindergarten classes in public schools the information on the records varies with the school. For example, the following are items from three kindergarten report cards in public schools.

**School A.**
1. Social development (6 items) Consistent
   Check Usually Seldom
2. Work habits (6 items)
3. Reading readiness (3 items)
   Rating scale - Above, Average, Below

**School B.**
1. Progress in habits - social and work (3 items each)
2. Progress in skills - reading and arithmetic
   Rating - A, B, C, D, F

**School C.**
1. Physical growth
2. Educational and social growth (5 items)
3. Scholastic growth (3 items)
4. Evidence of reading readiness (5 items)
   Rating - Above average, Average, Below average.

Nursery schools

**A.** The report card of one private nursery school was quite broad.
1. Health and Physical Control (8 items)
2. Diction, Music, Rhythm, Folk Dancing, Games (7 items)
3. Habits of Safety (7 items)
4. Language and Arts (7 items)
5. Appreciation and Knowledge (5 items)
6. Cooperativeness, Courtesy, Self Control and Self Reliance (14 items)
   Rating
   - Satisfactory growth
   - Improving
   - Needs improving

B. A record form recommended for use in Cooperative Playschools provide a space for qualitative comments for five broad areas of school behaviour. Each is broken into several sub-areas.

1. Behaviour in routine situations in the playschool (7 items)
2. Self-behaviour in playschool situations (7 items)
3. "Social" behaviour in group situations (6 items)
4. Motivation to attend playschool.
5. Notes concerning specific techniques for this child in the playschool.

Laboratory schools

A laboratory school in a university setting will have many types of records. Each will be dependent on the needs of the observer and the information required.

1. Student observation forms.
   e.g. A. 1. Date of observation.
2. Number of children
3. Equipment
4. Schedule
5. Record of individual child
   a) Skill in using hands
   b) Play alone or with others
   c) Toys and materials used

B. 1. Motor Activities
2. Mental - Adaptive Behaviour
3. Language
4. Social - Emotional Behaviour

2. School records
   e.g. A. Social and Development History
   B. Health Records

3. Research
   e.g. Emotional Episode
       Time of day: Date: Name:
       Apparent cause:
       Behaviour:
       Treatment:
       Treatment by whom:
       Reaction to treatment:
       Duration:
       Recorded by:
Special education centres

Methods of recording at special education centres (observed during the pretest of the record form) were not standardized.

Two types of records were made.

School A. 1. A checklist marked each month (with ✓) to note the child's characteristic behaviour in specific aspects of the programme. (47 items)
   A. Routines Washroom - turns tap
   B. Play Outdoors - swings
       Indoors - Floor blocks
   C. Emotional and Social Level - over social
   D. Speech words only
       babbles

2. A short qualitative report of "the child in the preschool" prepared for clinical presentation and the cumulative history. Based on recall and some anecdotal records. Uses such words as well adjusted, shy, immature, etc.

School B. Qualitative reports of the child's development based on anecdotal records.

An examination of these record forms shows that records reflect the needs of the observer and the goals of the school. There are some similarities in these records in the items to be reported on. The ways of reporting are basically rating scales and/or qualitative reports. The
amount of detail asked for show the greatest variation. A comparison of these record forms shows that it is difficult to report adequately on the growth and development of preschool children.

II. COMMON FEATURES

What are some of the features common to all special education preschools which determine the criteria of the recording system?

There would be one answer to the question:

"Why don't you keep more records on the children in the preschool?"

It is "Lack of time!"

For this reason the efficiency of checklists and rating scales seem to make them most suitable.

However, children cannot be reduced entirely to signs and symbols. The individuality of each child, particularly if in need of special help, is of prime importance. Therefore, there must also be room for some anecdotal material.

Another feature common to multidisciplinary settings of which the special education preschool is usually a part, is the cumulative case record on each child. A recording instrument in this setting must be concise. This writer decided that one page was the space limitation for this study. This decision was based on experience in trying to present adequate evaluation of these children to clinics and for written histories. More than one page is too much: material presented at clinics
must be brief. And yet to present only a few items does not give a clear picture of the child: material presented must be adequate.

The multidisciplinary approach to treatment and the inadequate supply of trained preschool teachers have a common effect in the recording instrument. In order that each member of the team understands what is being discussed and that preschool teachers are saying approximately the same thing there must be a standardizing of terms and structure.

A standardized method of speaking of various stages of growth in the areas of development is needed.

III. THE RATING SCALE USED FOR THIS STUDY

To meet this requirement (a standardized method of reporting), the recording instrument developed for this study utilized a five point rating scale on various items categorized into developmental areas.

The origin of the five point scale lay with the writer's experience in helping handicapped preschool children learn skills in self care. It was necessary to start with a base applicable to all children.

1. The child cannot, does not or will not do anything to help himself. The adult must do it all. Some children are past this stage in some self help activities by the time they come to nursery school. Others are not. But they all start, at some time, at this point.

2. The child makes an effort to help in the activity. This effort is not too efficient and the adult actually does most of the "work".
3. Then the child's efforts become more effective and the adult just helps in the more difficult part of the work.

4. The child can and does carry through the procedure of the activity with only verbal reminders and an occasional helping hand from the adult. The child may be inefficient but he does it.

5. The final step in this developmental sequence is when the procedure is so well under the control of the child that he is not only able to carry through with the job at hand but is also able to do something else at the same time.

An illustration of this pattern can be seen in the following series of anecdotal records.

The child is mentally retarded (approximate C.A. 6-9 M.A. 3-9 at the beginning of the record.)

Sept. 15 Child directed to fasten buttons on coat.
C. "I can't do it."

Sept. 30 Going home time.

Adult turns C. away from other children towards herself.

A. "Now, let's do up that coat."
Adult pushes button part way through buttonhole.
"See the button C. Catch it!"
As C. does this adult pushes button the rest of the way through the buttonhole.
C. "I did it!"
Oct. 23  Going home time.

Adult turns C. away from the other children towards herself.

A. "Take hold of that button C."

Adult points to button. C. takes it. Is awkward.

A. "Now put it through the button hole."

Adult holds buttonhole in proximity to button.

A. "Push it through! That's it! Now catch it with this hand."

Adult puts C.'s other hand ready to pull button.

C. pulls button through hole. Edge of button sticks so adult pulls coat to make it go through all the way.

Nov. 24  Going home time.

Adult hands C. her coat and directs her to a quiet corner.

C. puts on coat and starts to do button. Is distracted by "ruckus" of other children. Button slips.

A. "Look at the button C."

She starts over again. Carefully pushes edge of button through buttonhole with one hand and catches it with other hand. Pulls it through.

Comes over to adult. Big smile.

"See!"

Adult says "Good!" and gives her a hug.
Going home time.

A. "C. you can get your things on now."

C. goes to cupboard gets out boots and puts them on. Gets out coat and puts that on. Stands in midst of small group of children (3+0), and does up coat but she has it buttoned incorrectly. She looks at it, turns to adult and says

"I've done it wrong." She unfastens the buttons, walks over to A. saying

"I did it wrong."

As she walks she does the buttons up again, correctly and without any trouble.

Iscoe's Functional Classification shows how a five-point rating scale could be applied to many aspects of development. By utilizing his basic form a five-point rating scale for four general "activity" areas in a preschool programme with a check list of twenty-one items was developed.

Mc. V. Hunt has provided the theoretical basis for this kind of development pattern in Intelligence and Experience. This development is not a simple process of adding. With increasing experience the growth picture not only lengthens it also broadens. The activity pattern of one stage is still present in the next stage but in a new form. Thus C. is passing from Step 3 to Step 4 still utilizes the "push it through pull it out" pattern taught in Step 2 but she now does it without actual physical assistance. And in passing from Step 4 to Step 5 she maintains
her ability to perform the job without help and adds other areas of functioning – communication and motility.
To illustrate the wider application of the five-point scale two further examples are presented.

<table>
<thead>
<tr>
<th>5 Point Scale</th>
<th>1. No interest. No effort. Nothing.</th>
<th>2. Interest, effort but inefficient. Something but very inadequate.</th>
<th>3. Effort purposeful and knowledgeable but not quite adequate.</th>
<th>4. Adequate performance.</th>
<th>5. Combines adequate performances with others to achieve another goal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ation with peers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walking</td>
<td>Just sits.</td>
<td>If given adequate body support tries to walk but is unable to walk anywhere.</td>
<td>Needs helping hand for balance. Cannot be expected to walk anywhere without nearby assistance.</td>
<td>Can walk short distances unassisted. On occasion may need spoken reassurance. Walking is a goal in itself.</td>
<td>If something is wanted, if there is somewhere to go: the child walks. No help or reassurance, necessary. Walking is a means of achieving other goals.</td>
</tr>
</tbody>
</table>

N.B. Crutches, braces, canes etc. are considered an extension of the child and are not considered to be "assistance".
The question might be asked "Shouldn't there be a negative or zero rating for the child who is capable of performing but refuses?"
The child with a severe physical handicap is not given a negative rating for not being able to "perform" physically; the child who refused may have an emotional handicap that prevents him from "performing". The rating is not to be made on a predetermined evaluation. It is to be made on the actual level of performance. Evaluation comes later.

Although each step in this scale is numbered it is done only for convenience of reference. There is no "value" attached to each number. Each point on the scale is not necessarily a step of equal size. They are observable levels of performance and reflect development.

By using the rating scale and checklist methods of recording observed behaviour most of the "criteria for record forms" as already set out (Chapter I, p. 25) have been met. Check lists and rating scales are quick to mark. The rating scale with pre-established descriptions for each step are concise and make terminology standard. The format is also standardized. Because so little space is needed for marking, the recording can be comprehensive. Many items can be covered in a relatively small space. And by providing some space for anecdotal material the individuality of the child is also preserved.

IV. PRETESTS

The pretesting of the recording instrument demonstrated several things.

1. An instrument designed along the ideas presented above
was useful to preschool teachers. It provided them with a basis for a comprehensive evaluation of a child. The more noticeable aspects of behaviour were not the only observed "things".

2. A five point rating scale provided a more adequate rating than a three point (originally used to rate Emotions), or a six point (originally used to rate Play Activities). The three point scale was not fine enough and the six point was too fine for easy discrimination between the stages.

3. Validity - There were two pretests. The observations of each child used in the pretests were recorded separately, by two adults. Rating differed by no more than one place on each item on the second pretest.

4. A quantitative record combined with a little qualitative material presented an adequate "picture" of a child to a person who had not known the child personally. Therefore, a recording instrument of this type can be used by other members of a multidisciplinary team as well as by the teacher.

V. THE PRESENT RECORD FORM

Organization and form

The results of the pretests showed that the five point scale provided a better rating than a three point or six point scale. The recording instrument used for this study utilized a five point rating scale throughout.
The twenty-one items were divided into five general areas -

1. Routine Self Care
2. Language
3. Social Participation
4. Emotions
5. Play Activities

Play Activities were further divided to cover specific areas of development.

   a) Intellectual Development
   b) Imaginative and Creative Expression
   c) Manipulative Development
   d) Motor Development

These general "areas" for development are comparable to those described by F. Connors (Cruickshank & Johnson) and Fouracre et al. (Chapter 2).

The description of each part of the rating scale will be presented in the order in which they appear on the record form, with the exception of "Emotions". This will be presented last because it does differ from the rest.

The descriptions as presented here were contained in a manual of directions.
**Routine Self Care**

This section has already been presented in this chapter in the section on the origin of the five point rating scale. It will be presented again here for the sake of completeness. The description of each point on the rating is the same for each item. The items used are routines common to most preschool programmes.

<table>
<thead>
<tr>
<th>Routine</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toilet</td>
<td>1. Dependent on adult - no effort or no effective effort.</td>
</tr>
<tr>
<td>Washing</td>
<td>2. Adult does most of work but child's efforts are productive.</td>
</tr>
<tr>
<td>Dressing</td>
<td>3. Child does most of work but needs assistance to complete task.</td>
</tr>
<tr>
<td>Nourishment</td>
<td>4. Child able to accomplish task but requires spoken help (support) to complete it.</td>
</tr>
<tr>
<td>Rest</td>
<td>5. Child completes task without help and with adequate skill.</td>
</tr>
</tbody>
</table>

These stages of development in learning to be independent in routines can be found in descriptions of teaching methods in books on preschool procedures. (Read, Blatz et al.)

**Language**

<table>
<thead>
<tr>
<th>Receptive</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No response to verbal or gesture.</td>
<td>2. Relies mostly on gesture.</td>
</tr>
<tr>
<td>3. Relies on gestures to clarify spoken.</td>
<td></td>
</tr>
<tr>
<td>4. Slightly retarded in understanding.</td>
<td>5. No observable retardation handicap or immaturity.</td>
</tr>
<tr>
<td>Expressive Behaviour</td>
<td>1. Speech cannot be understood.</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Other Expressive Behaviour</td>
<td>1. No gesture.</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>1. No meaningful sounds.</td>
</tr>
</tbody>
</table>

Three items in this part of the record (Receptive, Expressive and Other Expressive Behaviour) are a modification of a system put forward by H. Aufricht in "A Proposed System of Classifying the Language Defects of Children with Cerebral Palsy". Here, language is taken as communication rather than the mechanics of speech.

1. Receptive language is the ability to understand what is being said by reacting meaningfully.
2. Expressive language is the ability to communicate with others by speech.

3. Other Expressive Behaviour is the ability to communicate with others by means other than speech - gestures.

   e.g. J. - cerebral palsy - five years old - Still on baby food - is fed breakfast in the nursery school in an attempt to get him to eat coarser food. The teacher asked him if he had eaten his breakfast. J. started to move his jaw up and down with his hand and then gagged. The teacher said, "Oh, you spit it out, did you?" J. nodded in the affirmative. The assistant, who had fed him his breakfast confirmed the story.

4. Vocabulary - The descriptions in this item evolved from several sources.

   Bowley in The Natural Development of the Child gave the stages of sentence development as originally presented by Nice. She designated two stages between the "single word" stage and the "complete sentence" stage. These were "early sentence" and "short sentence". Unfortunately there was no clear differentiation made between them. Mowrer, in a discussion on the development of language provided the phrase "minor sentences" to describe the stage between single words and full sentences. This is the description utilized for this study.
### Social Participation

#### With Adults

<table>
<thead>
<tr>
<th>Stage</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Indifferent - ignores - interest in toys etc.</td>
</tr>
<tr>
<td>2.</td>
<td>Aware of adult - watches adult(s) and their activities.</td>
</tr>
<tr>
<td>3.</td>
<td>Ask adult for help. Accepts direction in play activities.</td>
</tr>
<tr>
<td>4.</td>
<td>Come to adult with news and information. Adults part of child's world.</td>
</tr>
<tr>
<td>5.</td>
<td>Relates easily to adults in familiar situations.</td>
</tr>
</tbody>
</table>

#### With Children

<table>
<thead>
<tr>
<th>Stage</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Indifferent - ignores - afraid.</td>
</tr>
<tr>
<td>2.</td>
<td>Watching - interest in activities.</td>
</tr>
<tr>
<td>3.</td>
<td>Parallel play - beside but not with.</td>
</tr>
<tr>
<td>4.</td>
<td>Tries to relate to peers - tries to help - demands attention. Associative play.</td>
</tr>
<tr>
<td>5.</td>
<td>Cooperative play - play easily with peers.</td>
</tr>
</tbody>
</table>

#### Group Activity

<table>
<thead>
<tr>
<th>Stage</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>No interest - joins group only with adult pressures.</td>
</tr>
<tr>
<td>2.</td>
<td>Joins group willingly - watches - interested.</td>
</tr>
<tr>
<td>3.</td>
<td>Imitation.</td>
</tr>
<tr>
<td>4.</td>
<td>Enjoys activity.</td>
</tr>
<tr>
<td>5.</td>
<td>Makes suggestions for activity, that are original. Anticipation of next part of activity.</td>
</tr>
</tbody>
</table>

The pattern of development of social participation with both adults and children is very similar. The first three stages are not difficult to identify. The differentiation between the fourth and fifth stages is
more difficult.

With adults -

In stage three the child accepts adults as routine. The adult is there, so is the chair; they are both useful. In stage four he is demonstrating the establishing of a definite relationship. He comes to the adult with a definite purpose in mind. "See me", but he is not yet ready for the adult to come to him in the same way. Stage 4 is child → adult. Stage 5 is a give and take relationship: child ↔ adult.

With children -

Stage Three - Parallel play is easily described - beside but not with.

Stage Five - Cooperative play can be described as - with.

A definition of Stage Four is not so simple. It is play that is 'beside' but is complimentary to the activity of another child.

For example - In the doll centre.

Parallel - Two little girls, both putting dolls to bed in separate cribs.

Associative - Two little girls: one is putting the baby to bed, the other is setting the table. They are aware of each other but their individual activities could be carried on without the other, but won't be. When one moves out, the other will too.

Cooperative - Two little girls: one is setting the table,
the other is cooking supper. Their conversation indicates that their activities are related. One is "Mother", the other is "Sister", and when supper is cooked they will both sit down to the table to eat it.

Stage 4. could also be that time when the child demonstrates his need for a more specific relationship with another child but does not have adequate social skills to manage it. This stage is perhaps more noticeable with the handicapped child than with the non-handicapped. The crippled child cannot move his truck from his garage to the next child's garage. The mentally retarded child does not know what to do when he joins another child in an activity. The emotionally disturbed child can use only one way of approaching another child and it may not be acceptable. And so on. It is a stage that handicapped children sometimes get "stuck" in and recognition of it and the next stage should help adults arrange social opportunities that encourage development.

Group activity.

Group activities, as the phrase is used on the record form, are those controlled and directed by an adult - as compared to the informal groups that form in a free play situation. It could refer to story time, music, expeditions outside the school or special groups for learning new skills and concepts.

Here again the development has its parallel in the two previous items.

The important word in Stage 5 is 'original'. Adults may have
difficulty in realizing that a child whom they think of as having original ideas is just very skillful in doing what is expected of him. "Originality" is not recognized.

Although the descriptions of the stages of social development are drawn chiefly from the writer's own observations corroboration for them can be found in the more extensive list of items in the Curriculum Guide of Fouracre et al.

**Play Activities**

In a preschool setting "play" is the chief avenue of learning. The adult provides appropriate material and arranges the situations in such a way as to promote the acquisition of desired skills and knowledge. For example, when a child plays with one toy (a train) day after day and for as much of each day as he can, the removal of that toy from the shelves will push the child into playing with something else. And at the same time the teacher should build on the child's liking of that toy by showing him known concepts in a new form (making a train with clay).

Because play does provide so many learning experiences 'Play Activities' have been used to provide rating scales in four more areas of development.

**Intellectual**

**Imaginative and Creative**

**Manipulative - small muscle control**

**Motor - large muscle control**
On the record form under each of these headings are three spaces with no specific activities asked for. Instead the teacher is supplied with four lists of play activities under the appropriate headings to use as suggestions. They are as follows:

**Intellectual:**
- Books
- Colour recognition
- Matching-shape-size-numbers
- Quantity
- Interest in Project - animals - season etc.

**Imaginative and Creative:**
- Sand
- Water
- Drawing
- Painting brush and/or finger
- Clay - plastercine
- Dramatic play

**Manipulative:**
- Cutting
- Drawing
- Colouring
- Pasting
- Bead stringing
- Pegs
- Block Building
- Tinker toys etc.
- Puzzles

**Motor Development:**
- Walking
- Marching
- Jumping
- Stairs - up and down
- Slide
- Ball
- Tricycle
- Wagon
- Rhythm Instruments

These are just suggestions and are not intended to restrict the person marking the record. There is no reason why an activity such as making Halloween masks could not be used to rate Intellectual Development, Manipulative Development, and Imaginative and Creative Development so long as the appropriate rating is used for each area of development.

The chief reason for allowing the observer to select the activities to be rated is that many items may not be applicable for the particular child being observed.

If the adult is observing a three year old the activities chosen
for rating of manipulative abilities might be -

Block building
Bead stringing

Nine months later the list could be -

Block building
Tinker toys
Pasting

At five years the list for the same child might be -

Block building
Pasting
Cutting

In this way the type of activities demonstrate the child's interests: there is a "carry-over" for comparison from one recording to the next; the adult does not have to try to rate activities that are a very small part of the child's total day and space is not required for items that are not applicable.

The points on the rating scales for all the four areas of development under Play Activities are presented on p. 52 as the Basic Five-Point Scale.

1. Nothing
2. Something
3. Functional but not adequate.
4. Adequate
5. Combines adequate skill with others to achieve a broader goal.
As in Social Participation the distinction between Stages Four and Five is much finer than between the other stages.

**Intellectual development**

1. No interest
2. Interested or refusal.
3. Uses materials in-manipulates
   no real purpose.
4. Chooses materials - routine
   purpose in
   mind.
5. Combines materials - utilizes in
   unique way.

**e.g. Books**

1. Does not look at books at all.
2. Turns pages without looking at pictures. No conception of front-back, right-side up etc.
5. Uses books to gain more knowledge. May consult a book to find out how to feed a pet or may 'read' a story to another child.
Imaginative and creative expression


E.g. Clay 1. Refuses.

2. Handles it. Pushes it around to change the shape.

Enjoys the feel of it.

3. Copies actions of other children or adults - snakes, eggs, etc.


5. Has own ideas for work. Has some knowledge of how to form them.

Manipulative development


adult help and requires routine (physical). some help and manner. direction.

e.g. Cutting 1. Not interested. Has no idea of how to manipulate scissors.

2. Tries to use scissors. Adult must hold paper and guide direction of cutting.
3. Can manipulate scissors - understands "following the line" and can cut in general proximity to it. Still needs adult help.

4. Can cut out simple shapes. Follows adult's directions for projects - cutting Christmas decorations etc.

5. When working on a project can utilize cutting skill to produce needed material.

Motor development

1. Uninterested
2. Tries to bring efforts to completion.
3. Functional but still awkward - may require verbal help.
5. Good control.

e.g. See Walking (p. 52)

Stairs - up

1. Must be carried up.
2. Tries to lift feet up stairs when held by adult.
Tries to get up by some other means such as crawling but needs adult assistance.
3. Can get up in some way but adult must be close to give occasional help.
4. Can get up stairs without help but getting up the stairs is the goal.
5. Goes up the stairs with another purpose in mind -
to slide down. Is efficient and requires no adult help or supervision.

Emotions

The basic scale has already been presented and the only area of behaviour that is not rated in this way is "Emotions".

A five point rating scale is used for emotions but not in the above mentioned form. The scale used is an adaptation of material presented by Betty Shuey in "Written Records on Children". Under the topic of "Handling of Emotions" she speaks of the child's inner control pattern and used the words - adequate
- too much
- too little

This type of rating was utilized in a five point scale as follows:

<table>
<thead>
<tr>
<th>Too little</th>
<th>Adequate</th>
<th>Too much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

1. Too little - impulsive - very easily frustrated - displays of extremes in anger or affection (kissing, hugging etc.)

2. No description provided.

3. Adequate - spontaneous - suitable to situations.

4. No description provided.

5. Too much - inhibited - withdrawn.

Steps 2 and 4 were not described. The rating of a child who was not "Adequate" and was not "Too Little" was to be rated between the points
according to his display of emotional control. To describe the ways in which a child displays his emotional control (Bridges) would be impossible and unnecessary for this kind of recording instrument. However some qualitative information of the way the child displays his emotion and what situation precipitate it are necessary if any evaluation and planning is to be done. For this reason information relating to the ways in which the child most frequently displays his emotions is asked for. Space is provided for Response, Cause and Frequency for expressions of anger, fear etc. and pleasure, affection etc. as follows:

Expressions of anger, fear, anxiety, aggression etc.

Response - Tears, complains, screams, yells, hits, runs away or runs to adult for protection, temper tantrums, pouts.

Cause - Arrival at school, leaving school, requirements of routines, wants something (include example), approach of animals, hurt (accident or by another child), frustration.

Frequency - Often, rarely.

Expressions of pleasure, affection etc.

Response - Laughs, claps hands in delight, vocal exclamation, smiles, joins in group activity with display of enthusiasm, shows affection towards (give example - teacher, peer, etc.)

Cause - Activity of another person, child or group, pleasure in own activity or accomplishment, something 'funny' (give example), something 'nice' (give example).
One other item is also provided in this section:

Other items

Mannerisms - thumbsucking, sighing, sucks lip, rocks body, affected manner of speaking (unrelated to disability).

Response to discipline - accepts without objection, objects vocally, by stiffening body, by relaxing body, seems to understand and modifies behaviour.

The descriptive terms used here were meant to be used by the teachers as suggestions or guides and were not intended to restrict the teacher to only these forms of behaviour.

To summarize: in the introduction to this study (Chapter I, p. 1) some questions about goals were related to programme planning for both the individual child, and the whole programme. This presentation of each part of the record form demonstrates how answers to those questions may be provided. Each point on the scale of development of each item is an intermediate goal. The last stage is the final goal. This final stage constitutes the goals for the preschool programme.

VI. PROCEDURE FOR USE OF THE RECORD

Pretesting had shown that the recording instrument was reasonably valid.

The procedure that was followed in testing the use of the record form required that it be used with special education preschool groups.
In order to meet the definition of handicapped - as used in this study - the groups of children were representative of different types of handicaps.

The children

Four groups of young children attending preschool classes in special education centres were the sample population used for the testing of the use of the recording instrument. Two of these groups had been used for the pretests.

The following handicaps were presented by the children in these groups.

School A - Crippling conditions which result in motor handicaps. Cerebral palsy, muscular dystrophy, etc.

School B - Crippling conditions which result in motor handicaps. Like School A.

School C - Hearing impairments.

School D - Intellectual handicaps.

Procedure

1. Permission from the medical directors of Schools A, B, and C to carry out the study, was first obtained.

It was requested that the preschool teachers use the record forms, instead of any other means of recording that they might be using, to record their observations of the children's school behaviour during
a period of at least three months. And further, that they would use the record as the basis for reporting on the children's growth and development during that time. They were also asked to criticize it in terms of its usefulness to them, as teachers of young children with handicaps.

The directors were also asked for their opinions on the usefulness of such an instrument as a record.

2. The teachers were then instructed in the use of the record form with the manual of directions. The writer used the record form, in the presence of the teachers, to record the behaviour of one of the children, at Schools A and B. (No children were present when the teacher at School C was being instructed in the use of the instrument.) Questions were answered and the teachers were asked to contact the writer if any further questions arose.

Each teacher was provided with a manual of instructions and enough record forms to meet the needs of her group.

3. Seven months later the writer again contacted the teachers to ask them to have the records ready for collection in one month's time.

4. The records were collected at the end of an eight month period. The only communication, during that time between the writer and the teachers relating to the use of the record form, was that which came from the teachers. The writer did not ask them 'how things were going'. This procedure was used to obtain a truer picture of the use of records in preschool programmes.
Permission from the director of School D, to carry out the study, was also obtained.

This writer used the record forms to assess the children's level of development at the end of their first month at School D. She assessed them again, using the recording instrument, three months later.

The difference in the time periods between Schools A, B and C and School D is accounted for by the date of the opening of School D. The record forms were distributed to School A, B and C in the spring. School D did not start the school year until the fall.

VII. SUMMARY

This chapter has shown how the recording instrument used in this study was developed. Some methods of reporting on the progress of young children in preschool settings were examined first. The common needs of special education preschools that would affect record keeping were then outlined. By comparing these actual needs to the general information from Chapter I the form and method of recording for this study evolved. The major portion of this chapter has presented an explanation of each step of the scale for each item to be rated. Finally the procedure for the testing of the use of the recording instrument was given.
CHAPTER IV

RESULTS AND ANALYSIS OF THE RECORD FORMS

Many changes can take place in a preschool room in an eight month period. These can include not only changes in the growth and development of the children but also changes in staff and programming. In reporting on the results of this study these changes are made very apparent.

In this chapter the results will be presented in the order that they were received. That is, first, the directors of the centres were visited to obtain their permission to carry out the study. The comments, suggestions for use etc. that resulted from these meetings will be presented.

Then after presenting the total number of records used during the time of the study, the results will be presented school by school. The analysis of the results will draw this information together.

I. COMMENTS AND SUGGESTIONS FROM DIRECTORS

1. All the directors received the study plan with interest and all gave their approval to it as it was presented. All indicated that the teachers were in charge of their own departments and within those limits were free to utilize any tools that they felt would make their work more effective.

2. Communication: Two directors were very interested in the aspect of improved communication. Both asked, in one way or another, with whom was improved communication necessary. Both also said that if
the recording instrument could be a basis of improved communication then it would be worth using.

3. Size of recording instrument: One director pointed out that although the one page limit on the record form was a good one, the size of the page was too big. Cumulative records are kept on 11x8½ paper. The record form was 14x8½. The suggestion that both sides of the smaller sized paper be used was met with approval. For the time period of the study the larger sized paper was accepted.

4. Suggestion for further use: One director said that for microfilming of records, communication between treatment centres and more efficient reference and even more condensed form of the recording would be better.

His suggestion was as follows -

a) For the aforementioned purposes eliminate the anecdotal material.

b) Assume that the five point rating scale was understood and record consecutive assessments as follows -

<table>
<thead>
<tr>
<th>Date</th>
<th>Sept.</th>
<th>Nov.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

Routine Self Care

1. Toilet  3 4
2. Washing 4 4
3. Dressing 3 3

etc.
In this way the growth and development of the child over a considerable period of time could be rated on the one record.

5. Procedure for use of record: The request had been made that the teachers use the record form twice for each child over at least a three month period.

One director said that he thought that the three month period was hardly long enough to record changes in growth and development in handicapped children.

II. TOTAL NUMBER OF RECORD FORMS USED IN STUDY

The observations of the growth and development of 44 children were recorded by teachers in four special education centres. Half of these records came from one school. The actual division of returns are as follows:

<table>
<thead>
<tr>
<th>School</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doubles*</td>
<td>7</td>
<td>1</td>
<td>-</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>Singles+</td>
<td>15</td>
<td>7</td>
<td>5</td>
<td>-</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>8</td>
<td>5</td>
<td>9</td>
<td>44</td>
</tr>
</tbody>
</table>

* Doubles – Where two assessments were made on one child.
+ Singles – Where only one assessment was made on a child.
III. SCHOOL A - PHYSICAL HANDICAPS

The records

Doubles 7
Singles 12
Incomplete 3
Total 22

The school situation

The period of the study in this school was from the beginning of the spring term to November of the next school year (approximately eight months). At this school there was a change of teachers. The teacher who started keeping the records left at the end of the school year - July - and the new teacher started at the beginning of the next school year - September.

The preschool programme was a double one, with the younger children coming for nursery school in the mornings and the older children coming for kindergarten in the afternoon. One teacher worked with both groups.

As a part of their treatment programme the children received physio and occupational therapy.

The teacher

1. The new teacher had been working with the children for three months (September - November) when the records were collected. It was her first experience in working with handicapped children in a multi-disciplinary treatment centre.
2. The teacher welcomed the opportunity to develop a system of records. Although she used the record forms developed for the study she felt that it was not efficient enough for her needs.

She did not include any anecdotal material on the record form. When discussing the adequacy of the record form she asked how an observer could record the personality of the individual child. In further discussion she said she did note special incidents that revealed characteristic qualities of each child. She then realized that the anecdotal material asked for in the record form helped to give an adequate "picture" of the individuality of each child.

3. In developing her own system of records she utilized the rating methods used during the study. She prepared an 8x5 file card on each child, with a checklist similar to the one used in the study, horizontally across the top of the card. The dates of the assessments were arranged vertically on the left hand side of the card.

   e.g.

   **Self Care**   Language   etc.
   T   W   D etc.

   Jan. 6
   Feb. 4
   etc.

   She changed the method of rating emotions by rating each "side" (too much control and too little control) on a five point scale with five (5) as normal or adequate for both.

   The reverse side of the card was used for very brief anecdotal remarks on items and characteristics not included in the checklist.
e.g. - Toilet training started on --

- Specific causes of emotional upsets such as going for physio-

therapy.

The teacher planned to do monthly assessments on each child. She felt she understood the system of rating and could use it efficiently.

4. The teacher reported that she found that this method of rating a child's level of development did provide her with concrete information for "team" communication.

IV. SCHOOL B - PHYSICAL HANDICAPS

The records

Doubles 1

Singles 7

Incomplete -

Total 8

The school situation

The period of the study in this school was from the beginning of the spring term to November of the next school year (approximately eight months). There was no change of staff. There was the normal change of children from one group to another at the beginning of the new school year in September. No record was made of the number of these changes because only one child involved in the study moved to a new group.

The chief difficulty in this school in using the record forms was in having the child in the classroom for a long enough period for
adequate observation. The teacher said that the child could be in the
classroom for twenty minutes then he went out for physiotherapy. After
physiotherapy he went for occupational therapy, and from there for speech
therapy. He got back in time to sit in the story circle for a couple of
minutes. It was then time for rest and preparation for the trip home.
She felt there wasn't time for observation of the child in the preschool
when he had a schedule like that.

The programme was a double one, with younger children coming for
nursery school in the mornings and the older children for kindergarten
in the afternoons. There were two teachers. Both worked with both
groups.

The teacher

1. Prior to the time when this study was begun this teacher already
kept monthly records on the children in the form of a checklist - marked
simply with the check ( ✓ ) to indicate whether or not the child "did"
the item on the list. (See Chapter III p.45). She did not, as was requested
substitute the recording instrument of this study for her own recording
instrument. She continued to use her own recording instrument with the
result that only one child was assessed for this study during the spring
term. She did not have time to carry two systems of records. She did
start to use the recording instrument of this study in the fall term -
but still along with her own recording instrument.

2. The teacher said that the recording instrument did not "show"
the personality of the child.
3. When the records were returned to the writer no anecdotal material was contained in them. The teacher then took time to describe each of the children, assessed for the study, by presenting anecdotes of their behaviour. The writer instructed the teacher to add this information to the records in the space provided for anecdotal records. When she had done this she was asked if the record form now showed the personality of the child more adequately. She agreed that they did.

4. When the record forms were completed (as in 3) the teacher showed the writer her own checklist records. When she expressed doubts about its usefulness the suggestion was made that the substitution of a rating scale, such as was used in the study, would make her checklist more adequate.

"Uses scissors (\checkmark)" doesn't tell the reader much. But "Uses scissors (3)" would let the reader know that the child understood the way in which scissors are used, that the child used scissors when needed but also that the child still needs help to use them successfully.

The teacher agreed that the rating scale was more useful than a check.

V. SCHOOL C - HEARING HANDICAPS

The records

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Doubles</td>
<td>-</td>
</tr>
<tr>
<td>Singles</td>
<td>4</td>
</tr>
<tr>
<td>Incomplete</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
</tr>
</tbody>
</table>
The school situation

The record forms were given to the teacher in this school during the spring term (May) and were collected nine months later. At this school there was a change in class groupings. The group with whom the teacher was working in the spring all moved on to a more advanced class for the fall term. The teacher started the fall term with a new group of children.

The school programme was a double one. The younger children came in the morning; the older children came in the afternoon. There was also a programme for parents of infants in the afternoon. The teacher who had been instructed in the use of the record form taught the morning group of children and the afternoon parent programme.

The teachers

1. The teacher who made the assessments had not been working with the children during the fall term. She had them during the previous school year.

2. No assessment was made during the spring term because other teaching responsibilities were too heavy for her to take on any extra ones. Records received for the study were made just prior to the time of collecting them.

3. The teacher consulted the present teacher of the children when making the assessments. This second teacher had received no previous instruction in the use of the recording instrument.

4. Both teachers contributed to the criticism of the recording
Both teachers felt that the record could not be done quickly. It required time to sit down and to think about the child being assessed. The time element made it difficult to complete but having to think about the child and his development was a good thing. It helped them to "know" the child better.

Both teachers thought that this kind of record would be valuable at the end of the school year when the child was being advanced to another class and another teacher. It would be a good kind of report card.

The teachers thought that more use of the rating scale would make it easier to use. Practice with it would enable them to be more efficient in rating a child.

5. The teachers felt that the section on Language was not adequate for rating children with hearing handicaps. More items were needed.

VI. SCHOOL D — INTELLECTUAL HANDICAPS

The records

a) Doubles 9
   Singles -
   Incomplete -
   Total 9

b) Changes made to record form:

   Self Care Routines
i. Nourishment changed to Lunch
ii. No rest period.

Language
All children used verbal expressive language so Other Expressive Behaviour was not noted.

The school situation
The period of the study in this school was from the beginning of the school year (September) to the end of the fall term (end of December), approximately four months.

This was the first term that the school had been in operation. No system of recording the growth and development of the children in the classroom had been developed.

The programme was a half day one. The children arrived at 10:00 a.m., had lunch (which they brought from home) at noon, and left for home at 12:45 p.m. There were two teachers. The writer of this study was one of them.

The teacher
a) The writer of this study was one of the teachers working in this school. Assessments were made of all the children in attendance both at the beginning of the time of the study and at the end. She had no trouble using the record.

b) The teacher found that at the time of the second assessment the checklist was not entirely adequate to describe the development made by some of the children. The ones who had progressed from a preschool
programme to a more academic programme required more variety in the items under Intellectual Development and the section on Motor Development could have been rated once without any itemizing.

VII. ANALYSIS OF THE RECORD FORMS

This study hoped to show that the instrument developed would provide a useful basis for:

1. A description of a child and his development.
2. Programme planning and evaluation.

All records received were analyzed with these points in mind. The analysis and profile of the rating of a sample of the records will be presented to illustrate some of the uses to which the records can be put.

Individual records and profiles

A total of forty-four children were assessed, at least once, using the record form developed for this study, to rate the level of growth and development.

1. Descriptive -

   a) of the child: Some anecdotal material was necessary if the description of the child was to show his individuality.

   b) of development: Two assessments were needed to see development. Questions about development could be asked with only one assessment if the age and type and degree of handicap were included in the record.

2. Programme evaluation and planning -
Questions about development and tentative suggestions for programming could be made on the basis of one assessment. More definite suggestions for programming could be made on the basis of two assessments.

**Single assessments**

Three profiles with the accompanying analysis, representing one child from three of the groups are presented here. These are based on single assessments.

1. Physical handicap - nursery school group.
2. Physical handicap - kindergarten group.
3. Hearing handicap.
<table>
<thead>
<tr>
<th>Routine</th>
<th>T</th>
<th>W</th>
<th>D</th>
<th>N</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>R</td>
<td>E</td>
<td>E</td>
<td>O</td>
<td>V</td>
</tr>
<tr>
<td>Social</td>
<td>A</td>
<td>C</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotions</td>
<td>I</td>
<td>I&amp;C</td>
<td>Man.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROFILE I**

**RATING OF LEVEL OF DEVELOPMENT OF SUBJECT M.A. - SINGLE ASSESSMENT**

Name - M.A.
Age - 4 years
Handicap - Mild athetoid C.P.

Description:

This child shows average development in Self Care except for dressing. Language development is good. The level of Social Participation and Play Activities is lower than shown by Self Care and Language Development. He enjoys adult attention but does not seek activities with his peers. Play Activities marked are usually solitary. If these are typical activities they emphasize this child's general level of development.

Programme evaluation and Planning

The level of Emotional control (4-too much) might be indicative of the reason for levels of development in Play Activities and Social Participation. Does he lack self-confidence? Is he afraid to try something that might result in failure? He needs to be encouraged to try
more mature activities. He also needs to be encouraged in peer activities: block play, house centre might be good places to start. If this has already been done a further recording will probably show growth in the social and emotional areas of development.

Anecdotal material is needed for a more accurate description.
Routines  
Language  
Social  
Emotions  
Play  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routines</td>
<td>T</td>
<td>W</td>
<td>D</td>
<td>N</td>
<td>R</td>
</tr>
<tr>
<td>Language</td>
<td>R</td>
<td>E</td>
<td>O</td>
<td>V</td>
<td>C</td>
</tr>
<tr>
<td>Social</td>
<td>A</td>
<td>G</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotions</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play</td>
<td>I&amp;C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mot.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name - L.B.
Age - 6½ years
Handicap - Mod. severe athetoid C.P.

Description:
This child still needs help or supervision in Routines.
This is a low level for her C.A. "Independence being insisted on," in routines. Because of her handicap she has probably lacked opportunities to develop independence.

The level of Emotional control indicates immaturity. She objects to programme requirements.

The variety of play activities indicates interest and effort in school activities. A further report in 2-3 months would show if she succeeds.

Programme evaluation and planning

This child seems to need a lot of support in anything she tries to do. She needs encouragement and approval for her efforts. Because
the whole picture is one of immaturity and retardation, care should be taken not to push her too hard. For the present acceptance of the treatment programme and insistence on independence in routines would seem to be enough.
Name - V.C.
Age - 4 years 2 months
Handicap - Profound hearing loss

Description:
This child still needs supervision in Routines (except Rest) but demonstrates adequate knowledge and skill in carrying them out. He finds communication difficult but he is trying. He is not yet playing "with" other children and he is just beginning to include adults in his activities. Most of the time he watches them. This is an anxious child.
Anecdotal note, "Wants to be sure he's right..." Emotional Control is rated as "too much" and Expressions of Fear "Quiet anxiety, most of the time". Play Activities rate this child's development level at adequate or better on all items.

Programme evaluation and planning
There doesn't seem to be much that can be done about the "quiet anxiety" except continued support and reassurance from the adults. As
he develops a confidence in the adults in the school he may lose some of his anxiety. Another assessment in two or three months would be necessary before anything more could be suggested.
Double assessments

Two profiles with the accompanying analysis, representing one child from two of the groups are presented here. These have been based on double assessments.

1. Physical handicap
2. Intellectual handicap
Name: J.A.
Age - 5 years and 5 months
Handicap - Moderate cerebral palsy
Description:
The records kept of the activities of this child show that he is independent in all Self Care Routines, requiring no direction or supervision. Although there is a speech impediment it does not interfere with his communication. He takes part in social activities without any difficulty and his emotional development is adequate. No items have been given under Intellectual Development on the second record but the rating of the items on the first record under Play Activities indicate that he was just beginning to be interested in activities and concepts other than those requiring motor and manipulative skills. The rating of those play activities that are checked, on the second record, indicate adequate concepts and skills. More items in each category would give a better picture of this
child's level of play. (The limited play items might suggest a child with limited ideas.)

Development:

During the past eight months this child has developed from dependence on other people to independence. He has demonstrated increased skills in his social life as well as in his play activities, there is also an increase in his emotional control.

Programme planning and evaluation

If the limited number of play activities marked on the second record is an indication of the extent of this child's play activities it is necessary to help him broaden his interests with new equipment, new suggestions for old equipment etc. If it is not, then the child seems to be doing very well in his present programme and no special changes are indicated.

First and second ratings were done by different teachers.
Routines  
Language  
Social  
Emotions  
Play  

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I&amp;C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mot.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PROFILE 5
RATING OF LEVELS OF DEVELOPMENT
OF SUBJECT W.D. - DOUBLE
ASSESSMENT

Name - W.D.
Age - 7 years
Handicap - Intellectually retarded
Description:
This child is independent in self care routines. Anecdotal notes indicate that he takes pleasure in his independence, in managing at lunch time ("Enjoys pouring own milk"). Language is not adequate. There seems to be some difficulty in his receptive abilities if remarks must be directed right to him and group instructions are not understood. Expressive speech and vocabulary level are minimul. He seems to get along better with his peers than with the adults. His refusal to speak when spoken to, by an adult, is a good illustration of this difficulty. Emotional control is adequate. Anecdotal notes show that adult requirements make him withdraw from a situation. He receives special pleasure in "having a turn". Except for motor development this child's play activities reach the adequate level.
Development

This child has shown a great deal of growth and development in the last three months. The rating levels of the items under Play Activities are to be noted. Intellectual development items have risen from "definitely not adequate" (2) to "understanding, real effort, etc. although not yet adequate" (3). Imaginative and Creative Expression has shown even more growth from (2) "definitely not adequate" to (4) "adequate" and (3) "understanding, real effort etc." Cutting – an item in Manipulative development has gone from (1) "nothing" to (3) "understanding, real effort etc." Language Development and Social Participation show the same kind of growth.

Programme planning and evaluation

Despite this child's apparent fears of adult requirements he is showing a lot of growth and development. His present programme seems to suit him. As he cannot be made to speak the programme must make him want to speak – games with turns, and speaking parts seem to be most effective.
Short term assessment

When the directors were being consulted for permission to carry out the present study, one director said that he thought that the three month period was hardly long enough to record changes in growth and development in handicapped children (p. 76).

One child was assessed twice over a two month period. The analysis of his records follow.
Name - J.B.

Age - 5 years 3 months

Handicap - Tranverse myelitis - legs.

Description:

This child is now almost completely independent in routine self care. The only limitation is imposed by braces which prevent him from being able to manage his clothing. There is no language involvement and he displays mature behaviour in social situations.

Play Activity items indicate broad interests and the rating level indicates adequate or better skills and abilities in his work.

Language

Routine self care over a two month period is most noticeable. Toilet training had just been started at the time of the first record. Two months later this was successfully achieved. He is now able to follow through the washing routine without direction and requires only minimal support or direction in dressing himself. Development has also been
shown in the change of rating for play activities.

Programme planning and evaluation:

This child is doing very well on his present programme. No changes seem to be indicated. Could there be a change in the type of clothing so that he can manage to be completely independent in toileting?
Average scores

The average rating for each item was determined on the basis of school groups. This was done to see if characteristics of the specific handicaps could be shown. Each group profile is presented individually.

Averages are based on ratings made at the time of the second assessment, if two assessments were made, or on the single assessment.

School A - Physical handicaps

Records of the children in School A are divided into two groups:

- Nursery school or junior group.
- Kindergarten or senior group.

Junior Group:

An analysis of Table I shows characteristics that can be identified with physical handicaps. These are ratings of children in a nursery school or junior group. The averages are generally low.

Out of 21 items only 4 or 19.5 per cent are rated at adequate (4 or 3 for emotions) level. This rating is characteristic of the level of development of the nursery school group.

Items that could be considered characteristic of the handicap are to be noted.

1. Routine Self Care - lowest average rating - Dressing (2)
2. Language - low average ratings - Expressive (3.6)
   - Vocabulary (3.33)
3. Manipulative development - both just below "purposeful effort but not quite adequate" level (2.9, 2.66)
TABLE I
INDIVIDUAL, TOTALS, AND AVERAGE RATINGS OF DEVELOPMENT OF CHILDREN WITH PHYSICAL HANDICAPS ATTENDING SCHOOL A IN THE JUNIOR GROUP

<table>
<thead>
<tr>
<th>ITEMS OF RECORD</th>
<th>Int.</th>
<th>I&amp;C</th>
<th>Man.</th>
<th>Mot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>R</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>R</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>OE</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>V</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>A</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>G</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Int.</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>I&amp;C</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Man.</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Mot.</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Totals: 24 25 20 40 41 42 36 30 36 36 30 36 30 38 13 24 4 29 8 33 26

Averages: 2.4 2.5 2 4 4.2 4 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6

* Two assessments
4. Motor development — "not quite adequate" (3.3, 3.7)

Other items of interest are:

1. Social development — very consistent (3.6, 3.5, 3.6)

2. Intellectual development — one item close to adequate (3.8);

The other a little lower (3.25).

Profile 7 is a graphic illustration of the average of the ratings of development of the junior group of School A.

Physical handicap does seem to show up. Dressing is the most difficult part of self care for the physically handicapped preschool child. The vocabulary of these young children is very limited and they have difficulty expressing themselves. Language involvements are common among young physically handicapped children because the handicap may involve ability to speak and because the handicap impedes their opportunities for communication. Manipulative skills are low and motor skills are only just approaching the adequate level.

Social development, for the nursery school is normal — still parallel but beginning to move towards associative.

Senior group:

An analysis of Table II shows characteristics that can be identified with physical handicaps.

These are ratings of children in a kindergarten or senior group.

Out of 21 items 18 or 85.7 per cent are rated at adequate (4) or better. Other items come below the adequate (4 or 3 for emotions) level. Two items are rated as "adequate and integrated into other goals" (5)
PROFILE 7

AVERAGE OF RATINGS OF DEVELOPMENT OF CHILDREN WITH PHYSICAL HANDICAPS ATTENDING SCHOOL A IN THE JUNIOR GROUP
TABLE II

INDIVIDUAL, TOTALS, AND AVERAGE RATINGS OF DEVELOPMENT OF CHILDREN WITH PHYSICAL HANDICAPS ATTENDING SCHOOL A IN THE SENIOR GROUP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>J.A.*</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>S E.A.</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>U K.A.</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>B I.A.</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>-</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>J F.A.</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>E T.A.</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>C B.A.</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>T S.A.</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>S H.A.</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>45</td>
<td>43</td>
<td>45</td>
<td>39</td>
<td>30</td>
<td>12</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>23</td>
<td>15</td>
<td>38</td>
<td>22</td>
<td>35</td>
<td>20</td>
<td>41</td>
<td>41</td>
</tr>
</tbody>
</table>

Average:

|        | 7.7 | 4.4 | 4.4 | 4.4 | 4.2 | 3.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |

* Two assessments
Toilet and Nourishment

Items that could be considered characteristic of the handicap are to be noted.

1. Routine Self Care - lowest average rating - dressing (4.44)
2. Language - lowest average rating - expressive (3.33)
3. Manipulative development - lowest average - adequate (4)
4. Motor development - both the same (4.55)

Other items of interest are:
1. Social development - all above adequate (4.44, 4.11, 4.22)
2. Intellectual development - both close to adequate (3.75, 4.12)

Profile 8 is a graphic illustration of the average of the ratings of development of the senior group of School A.

The physical handicap does show up in some areas but not as obviously as with the younger group. Dressing is the most difficult part of Self Care. Expressive language is the most difficult part of communication. Manipulative and motor skills for this group of handicapped children are good. Of these children in the senior group, only one was identified as having a handicap severe enough to interfere noticeably with hand control. The ratings of E.A. are lower than the others in the group. (Also see Appendix B. p. 154)

Social development is normal for a kindergarten group during the winter term. Intellectual development levels cluster at the adequate level.
<table>
<thead>
<tr>
<th>Routines</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWDNR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>REOEV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>ACVG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I&amp;C</td>
<td>Man.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mot.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PROFILE 8

AVERAGE OF RATINGS OF DEVELOPMENT OF CHILDREN WITH PHYSICAL HANDICAPS ATTENDING SCHOOL A IN THE SENIOR GROUP
School B – Physical handicaps

An analysis of Table III shows characteristics that can be identified with physical handicaps.

Out of 21 items, 12 or 57.1 per cent are rated adequate (4) or better. 7 or 33.3 per cent of the items are rated "not quite adequate but with knowledge of and effort toward adequacy" (3). Only 1 or 4.7 per cent of the items has the average level of "combines adequate performance with other to achieve another goal". (5) That is Rest.

Items that could be considered characteristic of the handicap are to be noted:

1. Routine Self Care - lowest average rating - dressing (3.5)
2. Language - lowest average rating - expressive (3.62)
3. Manipulative development - both scores close to adequate (3.87, 4.14)
4. Motor development - both scores close to adequate (3.87, 4.14)

Other items of interest are:

1. Social development - all the same (4.5)
2. Intellectual development - highest rating here is four (4).

Profile 9 is a graphic illustration of the average of the ratings of development of the group from School B.

Physical handicap does seem to show up. Dressing is the most difficult part of self care for the physically handicapped child. Also expressive language. This is often one of the noticeable aspects of a physical handicap in young children. Also manipulative and motor skills generally are not enough to be integrated into larger activities. The
TABLE III
INDIVIDUAL, TOTALS, AND AVERAGE RATINGS OF DEVELOPMENT
OF CHILDREN WITH PHYSICAL HANDICAPS ATTENDING SCHOOL B

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>J.B.*</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>S</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>J</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>T</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>S</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>5</td>
<td>-</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Totals</th>
<th>30</th>
<th>31</th>
<th>28</th>
<th>38</th>
<th>40</th>
<th>35</th>
<th>29</th>
<th>33</th>
<th>37</th>
<th>36</th>
<th>36</th>
<th>22</th>
<th>30</th>
<th>4</th>
<th>29</th>
<th>26</th>
<th>30</th>
<th>29</th>
<th>31</th>
<th>29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Averages</td>
<td>3.25</td>
<td>3.87</td>
<td>3.5</td>
<td>4.25</td>
<td>5</td>
<td>3.67</td>
<td>3.75</td>
<td>4.27</td>
<td>4.62</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
<td>2.75</td>
<td>3.75</td>
<td>4</td>
<td>4.27</td>
<td>4.27</td>
<td>4.14</td>
<td>3.75</td>
<td>4.14</td>
</tr>
</tbody>
</table>

* Two assessments
### Profile 9

**Average of Ratings of Development of Children with Physical Handicaps Attending School B**

<table>
<thead>
<tr>
<th>Category</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routines</td>
<td>T</td>
<td>W</td>
<td>D</td>
<td>N</td>
<td>R</td>
</tr>
<tr>
<td>Language</td>
<td>R</td>
<td>E</td>
<td>O</td>
<td>E</td>
<td>V</td>
</tr>
<tr>
<td>Social</td>
<td>A</td>
<td>C</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotions</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play</td>
<td>I &amp; G</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Man.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mot.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
skills are a goal in themselves.

Social development is well up. When provided with opportunity for social experiences physically handicapped children develop fairly normally. Intellectual development rating is four (4). For kindergarten children during the winter term this is good. The programme should provide enriched experiences for intellectual activities during the rest of the year.

School C - Hearing handicaps

An analysis of Table IV shows that characteristics that can be identified with hearing handicaps are present in the average ratings of the group.

Out of 21 items, 9 or 42.8 per cent are rated "adequate (4) or better. 10 or 47.6 per cent are rated "not quite adequate" (3). Two or 9.5 per cent of the items have the average level of "combines adequate performance with others to achieve another goal" (5) - one is an Intellectual item, the other is a Motor development item. These were based on only one item for each of two children and therefore are not reliable as averages.

Items that could be considered characteristic of the handicap are to be noted:

Language - Receptive - "not quite adequate" (3)
- Expressive - "inadequate but trying" (2.5)
- Other expressive - "inadequate but trying" (2.5)
- Vocabulary - "not quite adequate" (3.5)
<table>
<thead>
<tr>
<th>ITEMS OF RECORD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S</strong></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>R.C.</td>
</tr>
<tr>
<td>D.C.</td>
</tr>
<tr>
<td>M.C.</td>
</tr>
<tr>
<td>V.C.</td>
</tr>
<tr>
<td>Totals</td>
</tr>
</tbody>
</table>

**Averages:**

- R.C.: 5.25
- D.C.: 4.75
- M.C.: 4.25
- V.C.: 4.25

- Int.: 2.5
- I&C: 3.25
- Man.: 3.25
- Mot.: 3.25

**Table IV**

**INDIVIDUAL, TOTALS AND AVERAGE RATINGS OF DEVELOPMENT OF CHILDREN WITH HEARING HANDICAPS ATTENDING SCHOOL C**
Social Participation - With adults - "not quite adequate" (3.5)
With children - "not quite adequate" (3.75)
Group - "not quite adequate" (3.25)

Profile 10 is a graphic illustration of the average of the ratings of development of the group from School C.

Language skills and social participation seem to be associated in this group. The averages cluster around the "not quite adequate" (3) level. The difference in the rating between Social Participation with adults and with children is interesting. Lack of verbal communication apparently doesn't interfere with peer activities as much as with adult-child activities.

The low score of "inadequate" (2) for one of the Manipulative items is based on one item for one child and is therefore not a reliable average for the group.

This group of just four children is really too small to be able to see any consistent trend in scores, with the exception of the items under Language Development.

School D

An analysis of Table V shows that characteristics that can be identified with intellectual handicaps are present in the average ratings of the group.

Out of 19 items, 8 or 42.1 per cent are rated adequate (4) or bet-
1L4

ter. 11 or 57.8 per cent of the item are rated below the four (4) level. Only one item is at the five (5) or "combines adequate performance with others to achieve another goal" level. That is Toilet.

Items that can be used to identify the specific handicap of this group show up in a summary of the averages of the ratings.

Routine Self Care - All items at a better than adequate level.

(4.55 - 5)

Language - Only one item at a better than adequate level -

Receptive language - (4.66)

Other two items below adequate (3.77 - 3.88)

Social Development - Relationships with adults is the only item above the adequate level (4.33). Relationships with peers and in groups both below the adequate level (3.77 - 3.88)

Emotions - Rates a little on the side of too little control (2.88)

Intellectual Development - Neither score reach adequate (3.44 - 3.88)

Imaginative and Creative Expression - The scores are similar to Intellectual Development - below adequate (3.44 - 3.55)

Manipulative Development - Fine muscle control is not adequate - (3.66 - 3.77)

Motor Development - Large muscle control - adequate or better - (4 - 4.33)

Profile 11 is a graphic illustration of the average of the ratings of development of the group from School D.
PROFILE 10

AVERAGE OF RATINGS OF DEVELOPMENT OF CHILDREN WITH HEARING HANDICAPS ATTENDING SCHOOL C
### TABLE V

**INDIVIDUAL, TOTALS AND AVERAGE RATINGS OF DEVELOPMENT OF CHILDREN WITH INTELLECTUAL HANDICAPS ATTENDING SCHOOL D**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>W</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>N</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>R</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>R</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>E</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>OE</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>V</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>A</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>G</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>G</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>E</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Int.</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>I&amp;C</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Man.</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>5</td>
<td>4</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Mot.</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>-</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>45</strong></td>
<td><strong>41</strong></td>
<td><strong>44</strong></td>
<td><strong>43</strong></td>
<td><strong>42</strong></td>
<td><strong>35</strong></td>
<td><strong>34</strong></td>
<td><strong>39</strong></td>
<td><strong>34</strong></td>
<td><strong>35</strong></td>
<td><strong>26</strong></td>
<td><strong>31</strong></td>
<td><strong>35</strong></td>
<td><strong>31</strong></td>
<td><strong>32</strong></td>
<td><strong>33</strong></td>
<td><strong>34</strong></td>
</tr>
<tr>
<td><strong>Averages</strong></td>
<td><strong>5.2</strong></td>
<td><strong>4.35</strong></td>
<td><strong>5.62</strong></td>
<td><strong>4.77</strong></td>
<td><strong>3.33</strong></td>
<td><strong>3.77</strong></td>
<td><strong>3.33</strong></td>
<td><strong>3.77</strong></td>
<td><strong>3.33</strong></td>
<td><strong>3.77</strong></td>
<td><strong>3.83</strong></td>
<td><strong>3.83</strong></td>
<td><strong>3.83</strong></td>
<td><strong>3.83</strong></td>
<td><strong>3.83</strong></td>
<td><strong>3.83</strong></td>
<td><strong>3.83</strong></td>
</tr>
</tbody>
</table>

* Two assessments
The intellectual handicap definitely shows up. Language, Social Development with peers or in controlled situations, Intellectual Development, Imaginative and Creative Expression are all less than adequate. These are all areas that are commonly associated with the development of children with intellectual handicaps.

The comments and suggestions of the directors of the centres that used the record form for this study were presented first in this chapter because they were the first "results" received.

The data from each of the schools was presented next. The number of record received, a brief description of the school situation and comments and reactions from the teachers of each school are shown.

The information gathered from the record forms was analyzed in several ways.

Individual record forms were studied to see if they presented a description of the child and his development and if they could be used for programme planning and evaluation. A sampling of the record analysis with profiles was presented.

Average scores were determined on the basis of school groups. Tables with all the individual ratings and profiles of the group averages were included. The average ratings were examined to see if characteristics of the group handicaps classification (physical, hearing, intellectual) showed up.
### PROFILE 11

**AVERAGE OF RATINGS OF DEVELOPMENT OF CHILDREN WITH INTELLECTUAL HANDICAPS ATTENDING SCHOOL D**

<table>
<thead>
<tr>
<th>Category</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routines</td>
<td>T</td>
<td>W</td>
<td>D</td>
<td>N</td>
<td>R</td>
</tr>
<tr>
<td>Language</td>
<td>R</td>
<td>E</td>
<td>C</td>
<td>E</td>
<td>V</td>
</tr>
<tr>
<td>Social</td>
<td>A</td>
<td>C</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotions</td>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Play</td>
<td>I</td>
<td>I&amp;C</td>
<td>Man.</td>
<td>Mot.</td>
<td></td>
</tr>
</tbody>
</table>

[Diagram of ratings distribution]
CHAPTER V
DISCUSSION AND RECOMMENDATIONS

This study was concerned with the recording of observations of preschool activities of young handicapped children. A record form that combined a checklist and a five point rating scale with anecdotal information was developed. This recording instrument was used in four preschool special education settings by teachers to assess the growth and development of the young children over a period of time.

I DEVELOPMENT OF THE INSTRUMENT

One of the purposes of this study was to develop a useful, concise and comprehensive instrument for recording observations of activities of young handicapped children.

The record as it was developed had twenty-one items with each item rated on a five point scale.

Of the forty-four (44) children observed for this study only seventeen (38.6 per cent) were assessed twice, although this was originally requested for all children. The reason given for this "omission" was lack of TIME. Three of the four teachers using the record taught two groups of children a day.

Although Fouracre et al. said that the teachers in his study did not find it difficult to rate the children on the 180 items of his record form it is doubtful if teachers such as those using the recording instrument developed for this study could find time for such an extensive
record. The teachers in this study, with the exception of the writer, all carried a double teaching load, - one group in the morning, another group in the afternoon. The teachers in the Fouracre study had only one group a day and spent several hours a week discussing growth and development, programming, etc. There was also a full time observer. The Social Competency Rating developed by Cain, Levine, and Elzey with 72 items was also used by full time observers, not the teachers. The T.M.R. Performance Profile developed by DiNola, Kaminsky and Sternfield has some 240 items. If teachers have difficulty finding time to use an instrument with just 21 items, how could they manage 240 items?

A recording instrument with as few as twenty-one items does show up characteristics of the different types of handicaps. Teachers using it felt it was weak in different places. The teacher of children with hearing handicaps felt that more items were needed in the Language area. The teacher of intellectually retarded children felt that more items were needed in the area of Intellectual Development. The writer's original area of work was with preschool aged children with physical handicaps. The record form reflected this bias in that the teachers of children with physical handicaps did not point out any special area that they felt was weak.

This kind of recording instrument could be adapted to meet the need of the group without losing its ability to describe the whole child. General areas of development, as used on the record form for this study (Routine Self Care, Language, Social Participation, Emotions, Intellect-
ual Development, Imaginative and Creative Expression, Manipulative Development, and Motor Development) could be retained. This would provide a uniformity in form and a comprehensive coverage of development.

The teacher could then select items for each of the areas that she felt were most significant in the growth and development of the children with the specific handicap of that group. The way in which Play Activities was organized on the record form for this study, with lists of sample items that can be adjusted to suit the child, is the suggestion for the whole record.

The five point rating scale has now been used enough to prove its usefulness. This could be used on all record forms regardless of the specific items to be rated.

Each programme, each handicap and each teacher are different. No recording instrument based on one programme or one type of handicap can be used without adjustment in another setting. But the results of this study seem to indicate that there are basic elements in recording that can be applied to many situations. By utilizing these basic elements a system of recording which is relatively objective, concise, easy to read and uniform can be developed in special education centres for handicapped preschool children.

II RECORDING OBSERVATIONS OF GROWTH AND DEVELOPMENT

The purpose of the record developed for this study was to provide a basis for reporting on the growth and development of the preschool
child. To do this the record must give adequate information for a
description of the child and his development. The information provided
by the record forms was adequate for describing the individual child.
Of the forty-four records collected for this study four (9 per cent) were
discarded as being too incomplete to provide information for descriptive
purposes.

Only the nine records (20.4 per cent) made by the writer had
anecdotal material for all areas of development. Anecdotal information
on records made by other teachers was very brief. For the most part it
was presented verbally to the writer and then added to the record after
a discussion about the child.

If no anecdotal material was included on the record the "picture"
of the child was inadequate. And yet with just a very few words of
explanation or description along with the rating the "picture" of the
child (the description) was fairly complete.

The profile created by the rating did present a picture that was
representative of the child even though two observers might not have
entirely agreed on the rating. The record of a child with a wide varia-
tion in his behaviour would show an erratic profile and the record of a
child displaying a steady level of development showed only minor varia-
tions in the profile.

The rating of the Self Care Routines presented the degree of the
child's independence in this area. For example, when all items except
Toilet were rated consistently at the adequate or better level the reason
could be found in the problem of motility also. It is interesting to note that only one child was rated below the adequate level for Nourishment or Lunch. And this child's handicap was noted as very severe.

(D.A.)

The section on Routine Self Care needed the least amount of anecdotal information for descriptive purposes.

The description provided by the rating of Language development was very difficult if no anecdotal material was provided. A generalized description could be made however. If ratings were consistently low then it was obvious that the child had a great deal of trouble communicating or if they were consistently high, the child had little trouble communicating even though there may have been a noticeable impediment in the verbal Language development. Anecdotal material in other parts of the record were often excellent sources of additional information on Language. Social Participation and Play Activities were especially useful.

By combining the ratings of Social Participation with the information of Emotions the description of the child was much improved. "Expressions of anger etc." were usually descriptive of the child's relationship with adults. Were the teachers unaware of fears, anxieties etc. that were within the peer group relationship?

Difficulties that arose in analyzing the record forms were the results of inadequacies of the instrument and the use of the instrument.

When only one item had been included in each of the divisions of
Play Activities it was very difficult to determine the kinds of play activities in which the child usually took part.

Anecdotal information was almost a necessity in making the ratings of the play activities meaningful. Just one "story" of one brief episode in the child's normal activities helped to describe the child.

Minor alterations were made to the items on the record in some schools. These alterations were omissions of items not observed and did not change the adequacy of the profile of the individual child. Possibly with a little thought items that were essential to the description of the handicap could also have been added. The remarks of the teacher of the hearing handicapped children and the teacher of the intellectually retarded children showed the inadequacy of the items of the checklist in certain areas.

It was not possible to report on development when only one assessment had been recorded. Only seventeen of the forty-four (38.6 per cent) were double records.

Two assessments did show growth and development in the individual child. Even in a three month period (School D) growth and development was evident although it was not as noticeable as in the records that covered a longer period of time. It was not necessary to have a change of rating on all items to show growth and development. If there had been a rise in the rating of some items in each of the areas growth had taken place and growth could be expected on other items at a later date.

When little or no growth and development in specific areas was
noted in records which had covered a longer period of time it was possible to utilize this information in programme planning and evaluation.

The record form was used as an initial assessment record for two children. The second assessment recorded just a short time later showed a seemingly amazing amount of change. This seems to indicate that although the record form can be used for initial assessments on children no real evaluation of the child's actual level of functioning can be made on that basis. It can serve only as an indication of the child's first reactions to the school situation. The second assessment, made after the child has become accustomed to the school environment is the one upon which a more reliable evaluation can be made.

III PROGRAMME EVALUATION AND PLANNING

Not only was the record form to provide a basis for a description of growth and development, it was also to provide a basis for programme evaluation and planning.

Programme evaluation and plans (if needed) were evolved from all the records retained for the study. Evaluation and planning, on the basis of one assessment could only be tentative. However where two assessments had been made the evaluation and planning was much more definite.

The evaluation and planning for V.A. is an example.

"Moderate use of the left hand should enable this child to achieve more in areas of Routine Self Care and in her Play Activities. Probably needs to be supplied with ideas and uses for toys and materials ..."
The slow but steady development of this child showed on the records. A continuation of this kind of development should be channelled into Self Care. Because she has been so limited her knowledge of the uses of play materials is also limited. She will need specific teaching in Play as well as in Self Care. Her level of development, at the time of the first assessment was so low that learning of specific skills would have been very slow. Her level of development is still low and will always be limited but can now start to be channelled into areas that are going to be most meaningful to her. The record shows that this is now possible.

An example of the tentative suggestions that can be made on a single assessment is the record of E.A.

"The difference in the rating between Routine Self Care (adequate or better) and Manipulative (inadequate) is quite noticeable. Would special teaching of manipulative skills raise his developmental level?"

With only one assessment the planning can only be done as a question. The direction of the growth and development cannot be determined so nothing definite can be said.

IV SHORT TERM ASSESSMENT

One of the medical directors said he thought that records made over a three month period with physically handicapped children would not show much change. The records of J.B. (a physically handicapped child) covered a period of only two months.
When the records cover only a short period of time (two to three months) there will not be a complete change in ratings but some change should be evident in some areas of development. A three month period is almost one third of the school year; it is one quarter of a full year; if no changes have taken place in that length of time then the preschool programme, as planned for that child, should be examined. Also, the child's total treatment programme and family and home situation should be examined to see if changes are taking place in other ways. If there has been no significant changes anywhere a problem is indicated. If there have been changes in areas other than the preschool one of two things is indicated.

1. The child is showing sufficient gain and there is no need to worry.

   But if this is the case a careful watch on the child's activities in the preschool for a six to eight week period is indicated. If there are no significant changes in that second period then

2. The preschool programme, as planned for that child, is not adequate. It needs a thorough examination by members of the treatment team and then a revision in the light of the decisions reached by that group.

V USEFULNESS FOR COMMUNICATION

A record conveys information from one person to another and/or from one time to another. This is communication. If records are not
used for this purpose they need not be kept.

It was hoped that the recording instrument devised for this study would prove to be a useful basis for improved multidisciplinary communication.

"Improved communication" amongst the treatment team was the aspect of this study in which two of the directors showed the most interest. It was also the aspect that the author had least opportunity to evaluate.

In one school (School D) no multidisciplinary meetings were held during the time period of the study.

In two schools (Schools B and G) the teachers were too busy with other responsibilities to do more than complete a few single record forms, shortly before they were collected. Therefore they could not be used for communication purposes.

In only one school (School A) did the teacher actually use the information as a basis for her reporting at multidisciplinary team meetings. She said that she felt it gave her a basis for factual information to pass on to others.

The teachers in one school (School C) did say that they thought it would make a good "report card" for school transfers. This is communication but time did not permit a test of this suggested use.

These results show that the record form can provide a basis for reporting on the growth and development of a child. A wider use of the record for communication would have given a better indication of the extent of its usefulness.
The lack of opportunity for team communication and the lack of concern in improving team communication seem to indicate lack of interest in the role of preschool education in the total treatment programme. A clarification of the role and the goals of the preschool in special education is needed first. Adequate reporting (communication) on the achievement of these goals to others will lead to a better understanding of the role. Adequate recording is one of the first steps. The responsibility lies with the preschool.

The contribution made by the preschool in the field of special education cannot be measured and evaluated until those people working in this area realize the importance of recording their observation of the growth and development of the children with whom they work. While the recording must suit the needs of the children and the school situation there should be a common base in them all. This base will, among other things, provide a standardization that will make the descriptions of the child more meaningful. This will not only improve professional communication it will also make the transfer of a child from one centre or class, to another, easier. Records that show individual strengths and weaknesses will assist the teacher and other members of a multidisciplinary team to plan more effective programmes, not only for the individual but also for the whole group. Also, standardized information is the beginning of material for further study and research - a much needed item in the field of special education for preschool children.
VI RECOMMENDATIONS

The findings of this study have shown that the importance of recording observations of growth and development of young handicapped children is not widely accepted in the preschool. The direct teaching responsibilities of the teachers occupy so much of their time records are looked upon as an extra chore not as an integral part of the work. With this in mind and based on the data gathered in this study the following recommendations are made:

1. Teachers of handicapped preschool aged children are as much in need of opportunities for further learning experiences as are teachers of handicapped school aged children. Preschool teachers in special educations should be encouraged to take further courses which will broaden their knowledge of special education. They should also include observations at other centres to see work with children with different handicaps and by teachers with different training, in these experiences.

   By having a better understanding of the responsibilities of preschool education in the total picture of special education the importance of keeping adequate records would become more apparent.

2. A standard but flexible type of instrument for recording observations of the growth and development of young handicapped children should be used by preschool teachers in special education. The five point rating scale and checklist is not only useful, concise and comprehensive for the busy teacher, it also provides a common frame of reference and facilitates the collection of material for research purposes.
3. The recording of observations on a standard but flexible type of recording instrument would be a waste of time if the information was not used. Not only the preschool teachers, but all members of a treatment team should become aware of the uses to which such records may be put. Some of these are for transfer from special preschool to special school, for reporting to parents, for reviewing the child's growth and development over the months and years of special care, for planning for the treatment outside of the preschool programme and for planning for the child's return to "normal" school experiences. Therefore adequate records of growth and development in the preschool should be used by all people working with the children.

VII RESEARCH

The review of related studies (Chapter II) showed the limitation of research with young handicapped children. Amongst the reasons for this are difficulty of identification, limited facilities for care of the young child and limited facilities for training of personnel. There are many problems related to this field of special education that need some more study. Some of them have been apparent during this study and the results of this study have raised several questions that could be the basis for further study.

1. What is the role of preschool education in special education?

There is a need for a study of preschool philosophies, practices and programmes. The differences in the role of the preschool in the
treatment and education of different handicaps plays an important part in determining the effectiveness of certain teaching methods and individual teachers. A clarification of this role in each type of centre would make a preschool experience more valuable.

2. What would be the best type of standard but flexible recording instrument? And how could it be developed to meet the needs of each centre?

There should be more of the kind of work done during this study to develop an instrument that is standard in form but meets specific needs of preschool aged handicapped children. (i.e. Hearing handicaps, intellectual handicaps, etc.)

VIII SUMMARY

There is a continuing need for the development of instruments useful in assessing children in need of special education. This study was concerned with the recording of observations of preschool activities of young handicapped children.

To help explain the reason for the basic problem—Is it possible to develop a useful, concise and comprehensive recording instrument that can be used in making observations of the growth and development of young children in preschool settings at special education centres?

the following questions were asked:

1. Why records?

2. How is information obtained for records?
3. What kind of records?

4. What are the criteria for records?

and

5. Why special education during the preschool years?

The answers provided background information for the complete study. Related studies were limited to the intellectually retarded or to older children. Record forms that had been developed were not concise—items to be rated numbered from seventy to two hundred forty.

An examination of preschool record forms showed that each instrument was developed to meet the needs of the individual schools and the observer.

For the purpose of this study a record form that combined a checklist and a five point rating scale with anecdotal information was developed. It was felt that this type of record would meet the needs of preschool special education centres.

The five point scale was applied to twenty-one items of preschool activities categorized into developmental areas.

Sources for the choice of categories and the application of the five point scale to each item was presented in some detail.

Four groups of preschool children in different special education centres, presenting several handicaps, were used for testing of the record. It was requested that the teachers use the record at least twice for each child over at least a three month period. Directors and teachers were also asked for criticisms regarding the record.
The records were collected at the end of an eight month period. Records of the observations of forty-four children were received from teachers. Half of these records came from one school.

1. Three of the teachers carried double teaching loads, i.e. One class in the morning and another in the afternoon.
   One teacher, the writer, had one class.

2. Teaching responsibilities of two teachers prevented them from completing more than a small number of single records.
   One teacher completed double records on approximately one third of the children in her school.
   One teacher completed double records on all the children in her school.

3. Three teachers used the record forms without including anecdotal information. These same teachers felt the record did not show the personality of the children. Inclusion of anecdotal information increased the adequacy of the record form.

4. One teacher adapted the record form to her own needs in developing her own system of records.

This study hoped to show that the instrument developed would provide a useful basis for:

1. A description of a child and his development.
2. Programme planning and evaluation.

All records received were analyzed with these points in mind. The analysis and profile of the rating of a sample of the records were
presented to illustrate some of the uses to which the records could be put.

Two assessments were necessary to see development.

Questions and tentative suggestions for programming and evaluation could be made on the basis of one assessment. More definite suggestions could be made on the basis of two assessments.

Some growth and development shows on short term assessments (two to three months) but not as much as with longer term assessments.

Average ratings were determined on the basis of school groups. This information indicated that characteristics of specific handicaps could be shown.

These results showed that a recording instrument with as few as twenty-one items could be used to provide an adequate description of a handicapped child. Two consecutive assessments showed development and programme planning and evaluation was facilitated by using the record forms to note areas of strength and weakness. The records also showed up characteristics of specific handicaps.

Because of the time limitations imposed on most teachers of young handicapped children it would be impossible to complete the extensive records developed in earlier studies but the results of this study show that a record with only twenty-one items can be used for several purposes. No one recording instrument developed in one centre can be used without adaptation in another centre. The special needs of the individual centres must be met. The recommendation was made that
further work be done to develop a record that was standard in form, with all areas of development covered and using the five point rating scale.

The aspect of Communication had the least opportunity for testing. The pressure of teaching responsibilities and lack of opportunities for communication were the reasons for this. However where the record form was used as a basis of communication it was very useful.

The contribution made by the preschool in the field of special education cannot be measured and evaluated until those people working in this area realize the importance of recording their observations of the growth and development of the children with whom they work.
BIBLIOGRAPHY


Almy, M.  *Ways of Studying Children*  Bureau of Publications Teachers College Columbia University  New York  1956


Bowely, Agatha H.  "A Study of the Factors Influencing the General Development During the Pre-School Years by Means of Record Forms"  *The British Journal of Psychology*  Monograph Supplements Cambridge University Press  1942


Cohen, D.H. and Stern, V.  *Observing and Recording the Behaviour of Young Children*  Practical Suggestions for Teaching Number 18 Bureau of Publications Teachers College Columbia University  New York  1958


Cruickshank, William, M., and Johnson, G. Orville (editors)  *Education of Exceptional Children and Youth*  Prentice - Hall, Inc.  1958

Fouracre, M.H., Connors, F.P., and Goldberg, I.I. The Effects of a Preschool Program Upon Young Educable Mentally Retarded Children Volume II The Experimental Preschool Curriculum Department of Special Education Teachers College Columbia University New York City 1962

Good, C.V. and Scates, D.E. Methods in Research Educational, Psychological, Sociological Appleton-Century Crafts Inc. 1954

Hunt, J. McV. Intelligence and Experience The Ronald Press Company New York 1961


Isaacs, S. Social Development in Young Children A Study of Beginnings Harcourt, Brace and Company New York 1939


Kirk, Samuel A. Educating Exceptional Children Houghton Mifflin Company Boston 1962

Kirk, Samuel A. Early Education of the Mentally Retarded University of Illinois Press Urbana 1958


Lassman, Grace Language for the Preschool Deaf Child Grune and Stratton New York 1950


Linch, Lawrence J. "Readers Exchange" Children Volume 1 Number 6 November - December 1954 p. 240


Shuey, Betty "Written Records on Children" *The Journal of Nursery Education* Volume XXIII Number 3 Spring 1958 (Abstract)


Thomas, R.M. *Judging Students Progress* Longman, Green & Company 1954

Tyler, R.W. "The Place of Evaluation in Modern Education" *Elementary School Journal* XLI September 1940 pp. 19-27


Yum, L.G. "Adapting the Nursery School for the Multiply Handicapped Cerebral Palsy Child" *Exceptional Children* Volume 22 Number 1 October 1955
OTHER REFERENCES

Preschool Record Forms

1. Kindergartens in public schools
   A. Concord Public School Kindergartens
   B. Cleveland Public Schools
   C. Quincy Public Schools Kindergarten Report Card
   These record forms were found in the collection of school record forms of Mrs. A. Borden, Child Study Centre, University of British Columbia.

2. Nursery Schools
   A. Private nursery school record - copied from the collection of family school records of Mrs. E. Harding.
   B. Play school record - prepared by E.S.W. Belyea, Assistant Professor, Department of Psychology, University of British Columbia.

3. Student observation forms
   A. Preschool Observation Report, Education 331, University of British Columbia.
   B. Observation Analysis, Psychology 320, University of Washington.

4. School records
   A. Child Study Centre
   B. University of British Columbia
5. Research record

Institute of Child Study
University of Toronto

6. Special Education Centres

A. G.F. Strong Rehabilitation Centre
Vancouver, British Columbia.

B. Children's Treatment Centre
North Surrey, B. C.
Included in this review are also some of the publications which are especially directed to preschool education - for both handicapped and war-handicapped children.
### Routine Self Care

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Toilet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Washing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Dressing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Nourishment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Rest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Language

1. Receptive
2. Expressive
3. Other expressive behaviour
4. Vocabulary

### Social Participation

1. With Adults
2. With Children
3. Group Activity

### Emotions

1. Control Pattern
   - Too Little
   - Adequate
   - Too Much
2. Expressions of anger, fear, anxiety, aggression etc.
   - Usual response(s)
   - Cause(s)
   - Frequency
3. Expressions of pleasure, affection etc.
   - Usual response(s)
   - Cause(s)
   - Frequency
4. Other items - mannerisms
   - response to discipline

### Play Activities

1. Intellectual Development:

2. Imaginative and Creative Expression:

3. Manipulative Development:

4. Motor Development:
<table>
<thead>
<tr>
<th>Routine Self Care</th>
<th>Toilet</th>
<th>Dressing</th>
<th>Nourishment</th>
<th>Rest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent on adult - no effort or no effective effort.</td>
<td>Adult does most of work but child's efforts are productive.</td>
<td>Child does most of work but needs assistance to complete task.</td>
<td>Child able to accomplish task but requires spoken help (support) to complete it.</td>
<td>Child completes task without help and with adequate skill.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language</th>
<th>Receptive</th>
<th>Expressive</th>
<th>Other Exressive Behaviour</th>
<th>Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>No response to verbal or gesture.</td>
<td>Speech cannot be understood.</td>
<td>Speech understood with difficulty.</td>
<td>No gesture.</td>
<td>No meaningful sounds.</td>
</tr>
<tr>
<td>Relies mostly on gesture.</td>
<td>Speech understood with some difficulty.</td>
<td>Reaching gesture. No 'yes' or 'no' gesture.</td>
<td>Reaching - pointing 'yes' and 'no' - a few with symbolic value.</td>
<td>Signs, sounds, etc. used with meaning.</td>
</tr>
<tr>
<td>Slightly retarded in understanding.</td>
<td>No immaturity, slurring, omissions etc.</td>
<td>No need.</td>
<td></td>
<td>Full sentences.</td>
</tr>
<tr>
<td>SOCIAL PARTICIPATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>With Adults</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indifferent -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ignores -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interest in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>toys etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aware of adult-watches adult(s) and their activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ask adult for help. Accepts direction in play activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Come to adult with news and information. Adults part of child's world.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relates easily to adults in familiar situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>With Children</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indifferent -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ignores -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>afraid.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>interest in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parallel play -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>beside but not with.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tries to relate peers-tries to help - demands attention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative play -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>play - play easily with peers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associative play.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Group Activity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No interest -</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>joins group only with adult pressures.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joins group willingly - watches - interested.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imitation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoys activity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes suggestions for activity, that are original. Anticipation next part of activity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EMOTIONS

Control Pattern:
(1) Too little - impulsive - very easily frustrated - anger, etc. displays of extremes in anger ('••') or affection (kissing, hugging etc.)
(2) Adequate - spontaneous - suitable to the situation.
(3) Too Much - inhibited - withdrawn.

Expressions of anger, fear, anxiety, aggression etc.:
Response - Tears, complains, screams, yells, hits, runs away or runs to adult for protection, temper tantrums, pouts.
Cause - Arrival at school, leaving school, requirements of routine, wants something (include example), approach of animals, hurt (accident or by another child), frustration.

Expressions of pleasure, affection etc.:
Response - laughs, claps hands in delight, vocal exclamation, smiles, joins in group activity with display of enthusiasm, shows affection towards (give example - teacher, peer etc.)
Cause - Activity of another person, child or group, pleasure in own activity or accomplishment, something 'funny' (give example), something 'nice!' (give example).

Other items, mannerisms, response to discipline:
Mannerisms - thumb sucking, sighing, sucks lip, rocks body, affected manner of speaking (unrelated to handicap).
Response to discipline - Accepts without objection, objects vocally, by stiffening body, by relaxing body, seems to understand and modifies behaviour.
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLAY ACTIVITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intellectual Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Imaginative and Creative Expression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Activity*</td>
<td>No interest or refusal.</td>
<td>Touching - exploring.</td>
<td>Imitation:</td>
<td>Enjoys activity plays easily in situation or with materials.</td>
</tr>
<tr>
<td><strong>Manipulative Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Activity*</td>
<td>No interest or refusal.</td>
<td>Interest - tries - requires adult help (physical).</td>
<td>Skill 'understood' - has difficulties and requires some help and direction.</td>
<td>Skill mastered - uses in a routine manner.</td>
</tr>
<tr>
<td><strong>Motor Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Activity*</td>
<td>Uninterested - unable to manage.</td>
<td>Tries requires help to bring efforts to completion.</td>
<td>Functional but still awkward - may require verbal help.</td>
<td>Adequate control - no support necessary.</td>
</tr>
</tbody>
</table>

* Specific Activities - examples - use at least one of each - preferably two - use same activities each time of recording but new ones can be added as child matures.
Intellectual:
- Books
- Colour recognition
- Matching - shape - size - number
- Quantity
- Interest in Project - animals - season etc.

Manipulative:
- Cutting
- Drawing
- Colouring
- Pasting
- Bead stringing
- Pegs
- Block building
- Tinker toys etc.
- Puzzles

Imaginative and Creative:
- Sand
- Water
- Drawing
- Painting brush and/or finger
- Clay - Plastircine
- Dramatic play

Motor Development:
- Walking
- Marching
- Jumping
- Stairs - up and down
- Slide
- Ball
- Tricycle
- Wagon
- Rhythm instruments
### SUBJECTS - INFORMATION FROM RECORD FORMS

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Birthdate</th>
<th>Age, as recorded on final record</th>
<th>Handicap</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.A.</td>
<td></td>
<td>5 years</td>
<td>C.P., spastic quad., very severe.</td>
</tr>
<tr>
<td>N.A.</td>
<td>October 19/59</td>
<td>5 years</td>
<td>C.P., spastic quad., mild.</td>
</tr>
<tr>
<td>V.A.</td>
<td>September 11/59</td>
<td>5 years</td>
<td>C.P., spastic quad., severe.</td>
</tr>
<tr>
<td>A.A.</td>
<td></td>
<td>4 yr. 3 mo.</td>
<td>C.P., spastic quad., moderate.</td>
</tr>
<tr>
<td>G.A.</td>
<td></td>
<td>5 years</td>
<td>Arthrogryposis</td>
</tr>
<tr>
<td>M.A.</td>
<td></td>
<td>4 years</td>
<td>C.P., athetoid, mild.</td>
</tr>
<tr>
<td>L.A.</td>
<td></td>
<td></td>
<td>Mentally retarded.</td>
</tr>
<tr>
<td>P.A.</td>
<td></td>
<td></td>
<td>C.P., moderate.</td>
</tr>
<tr>
<td>C.A.</td>
<td></td>
<td>4 years</td>
<td>C.P., mild.</td>
</tr>
<tr>
<td>D.A.</td>
<td></td>
<td>4½ years</td>
<td>Brain damage.</td>
</tr>
<tr>
<td>J.A.</td>
<td>October 22/59</td>
<td>5 years</td>
<td>C.P., moderate.</td>
</tr>
<tr>
<td>E.A.</td>
<td></td>
<td>6 years</td>
<td>C.P., spastic quad.</td>
</tr>
<tr>
<td>K.A.</td>
<td></td>
<td>6 years</td>
<td>Surgery on hands and feet.</td>
</tr>
<tr>
<td>I.A.</td>
<td>October 17/58</td>
<td>6 years</td>
<td>C.P., spastic &amp; ataxia, mild.</td>
</tr>
<tr>
<td>F.A.</td>
<td></td>
<td>6 years</td>
<td>C.P., mild.</td>
</tr>
<tr>
<td>T.A.</td>
<td></td>
<td>7 years</td>
<td>Muscular dystrophy.</td>
</tr>
<tr>
<td>B.A.</td>
<td></td>
<td>6 years</td>
<td>C.P., spastic quad., mild.</td>
</tr>
<tr>
<td>Name</td>
<td>Date</td>
<td>Age</td>
<td>Diagnosis</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>---------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>S.A</td>
<td></td>
<td>5 years</td>
<td>C.P., spastic mild.</td>
</tr>
<tr>
<td>H.A</td>
<td></td>
<td></td>
<td>Kidney condition.</td>
</tr>
<tr>
<td>J.B</td>
<td>August 5/59</td>
<td>5 yr. 3 mo.</td>
<td>Transverse myelitis, moderate - legs.</td>
</tr>
<tr>
<td>S.B</td>
<td></td>
<td>5 yr. 8 mo.</td>
<td>Aplasia congenital multiplex.</td>
</tr>
<tr>
<td>P.B</td>
<td>December 17/59</td>
<td>5 years</td>
<td>Arthrogryposis.</td>
</tr>
<tr>
<td>A.B</td>
<td>November 27/59</td>
<td>5 yr. 1 mo.</td>
<td>C.P., athetoid.</td>
</tr>
<tr>
<td>N.B</td>
<td>January 20/59</td>
<td>5 yr. 11 mo.</td>
<td>Spina Bifida</td>
</tr>
<tr>
<td>D.B</td>
<td>July 20/59</td>
<td>5 yr. 4 mo.</td>
<td>C.P., athetoid &amp; ataxia visual problem moderate.</td>
</tr>
<tr>
<td>L.B</td>
<td>November 8/58</td>
<td>6 yr. 1 mo.</td>
<td>C.P., athetoid, moderately severe.</td>
</tr>
<tr>
<td>K.B</td>
<td>September 15/58</td>
<td>5 yr. 7 mo.</td>
<td>C.P., spastic, moderate.</td>
</tr>
<tr>
<td>R.C</td>
<td></td>
<td>4 yr. 7 mo.</td>
<td>Severe hearing loss.</td>
</tr>
<tr>
<td>D.C</td>
<td></td>
<td>5 yr. 1 mo.</td>
<td>Profound hearing loss.</td>
</tr>
<tr>
<td>M.C</td>
<td></td>
<td>4 yr. 7 mo.</td>
<td>Profound hearing loss.</td>
</tr>
<tr>
<td>V.C</td>
<td></td>
<td>4 yr. 2 mo.</td>
<td>Profound hearing loss.</td>
</tr>
<tr>
<td>P.D</td>
<td>December 21/58</td>
<td></td>
<td>Intellectual retardation.</td>
</tr>
<tr>
<td>S.D</td>
<td>October 29/57</td>
<td></td>
<td>Intellectual retardation.</td>
</tr>
<tr>
<td>M.D</td>
<td>October 14/58</td>
<td></td>
<td>Intellectual retardation.</td>
</tr>
<tr>
<td>D.D</td>
<td>September 21/57</td>
<td></td>
<td>Intellectual retardation.</td>
</tr>
<tr>
<td>W.D</td>
<td>February 14/58</td>
<td></td>
<td>Intellectual retardation.</td>
</tr>
<tr>
<td>B.D</td>
<td>May 20/58</td>
<td></td>
<td>Intellectual retardation.</td>
</tr>
</tbody>
</table>
C.D. September 17/58 Intellectual retardation.
J.D. October 18/58 Intellectual retardation.

SPECIAL EDUCATION CENTRES COOPERATING IN THE STUDY

School A Children's Treatment Centre
North Surrey, B. C.

School B G.F. Strong Rehabilitation Centre
Vancouver, B. C.

School C Preschool for Hearing Handicapped Children
Sunnyhill Hospital, Vancouver, B. C.

School D Research Unit for Exceptional Children
University of British Columbia
Vancouver, B. C.