The feasibility of using a "buddy" system to assimilate handicapped children back into the regular classroom.

Brainerd Public Schools, Minn.

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Selected normal children were paired in a buddy relationship with emotionally disturbed or socially maladjusted children (termed emotionally handicapped) from a special class during a summer outdoor, eight-week nature study program. Purposes were to facilitate social interaction and improve the social relationships of the emotionally handicapped children. Social techniques used are described, as are the devices and techniques used to evaluate the program, which included a social preference scale, structured interviews of children, parents, and staff, and an advisory board of research specialists. The program was reported effective in establishing compatible social relationships between the buddies and the handicapped while under staff supervision (but not in free play), and developing socially acceptable behavior by the handicapped children for longer periods of time and the ability to accommodate to group activities for shorter periods of time. It was concluded that children aged six to nine years cannot accept the emotionally handicapped as friends but can enjoy such learning programs and be good models of behavior. (KW)
THE FEASIBILITY OF USING A "BUDDY" SYSTEM TO
ASSIMILATE HANDICAPPED CHILDREN BACK INTO
THE REGULAR CLASSROOM

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A. Introduction

This study grew out of a concern of the professional staff of this school district for emotionally handicapped children - especially those between the ages of four and ten. A program was organized for seven such children who were placed into a special room where the time schedule and curriculum were flexible. One teacher and one aide were assigned to the room. Consultants were available on a contract basis for a psychiatric social worker, psychologist, psychiatrist and pediatrician. Each child admitted to the room was admitted with the temporary diagnosis that he is educable. The major objective was, therefore, to provide an environment where children with an emotional involvement could function with a feeling of success while they were being equipped with the basic skills necessary to function as a self-supporting adult.

One of the major problems encountered with these children in this new environment was their inability to
relate to other children. As long as they were in the sheltered environment of the special class, the problem of social relationships was not so apparent. But when they associated with other children during integrated classes and lunch time, the problem surfaced.

Recognizing the importance of satisfactory social relationships of these children, the staff conceived the idea of a "Buddy" system whereby the members of this class were to be matched with compatible children of normal classrooms under certain conditions. It was hoped that relationships resulting from such arrangements would do much to compensate for the usual lack of social interactions.

B. Clarification of Terms

Emotionally Handicapped Children. This term refers to children usually classified as socially maladjusted and emotionally disturbed. It includes children who seem unable to learn but this inability cannot be explained by intellectual or medical deficits. Their symptoms are shown by inability to work or play with others, inability to act commensurate to chronological age, poor self-conception, inability to cope with stressful situations and compulsive behavior.

Buddy. This is the individual placed into this class
with the intention that, with some guidance, he would pair himself off on many occasions with a particular emotionally handicapped class member to provide this handicapped child with some degree of human relationships needed for development of social skills.

Cases one through seven refer to the Buddies in the program.

Cases a through g refer to the children taken from the special class; those with learning disabilities or emotional behavior problems. A brief description of cases a-g is given in Appendix D.

C. The Experimental Study

Since the house where the special class was held last year was located some distance away from an elementary school where children of equal age were attending, it was difficult to bring about a social interaction program during the regular school term. For this reason, the idea of having an eight-week summer program was conceived. Basically, this involved the selection of seven children from the regular classrooms to be placed with the seven children of the emotionally handicapped room for an eight-week summer program, running from June 10 through August 2, three hours per day.
Two of the staff members and eleven children are shown here in one of their first field explorations.

An attempt was made to "match" up the special class students with buddies in order to facilitate more social interaction and the activities of the group were outdoor projects of various kinds. The predominant outdoor setting was selected because it provided more opportunities for pairs of children helping each other, thereby facilitating social interaction.
This picture captures two children as they work in pairs. Note the rather obvious motor difficulty of the one child in jumping over the tree branch.

D. Selecting the Buddies

The type of child wanted for placement into this group as buddies was discussed with groups of teachers to see whether they might have suitable children in their classrooms. The teachers who indicated that they might have such children were then given the questionnaire described more fully in Appendix A. Essentially, we were looking for children such that each of the members of the emotionally handicapped class would have one student from a regular classroom available to work with and play with in the planned and largely outdoor activities for the eight-week summer program. The staff members made it a point to do everything possible to help these children
find their buddies and generally proceed with the pairing up. According to the criteria for selection of the buddies, these children were rated by their peers as having characteristics of being true friends, having leadership qualities and having a great love for the outdoors. Care was taken to be sure that there were buddies assigned to the room who could be matched to class members by age and sex, and, as indicated by Question 10 of the questionnaire, by temperament.

Each parent of the buddies selected was called in for a conference, the experimental program was explained to them and their approval for the child's participation was obtained. They, and the parents of the emotionally handicapped children, were given our assurances that no human rights would be violated and our policies and procedures regarding this matter were discussed with them. All of this was done on an individual basis. The parents of the buddies did not meet the other parents through any effort of the staff. The size of the community is such, however, that there may have been some acquaintances. The entire program was explained to the parents of the buddies in a frank manner. They were told that their children had just gone through certain procedures by both teachers and children in an endeavor to find a certain type of child who has a very well-developed personality and one
who would be especially suited to help other children who are in dire need of social interaction.

One of the children discovers a yellow spider. In such situations, the buddies quickly became the masters and the others became hesitant and even frightened.

It was explained to the parents that certain techniques would be used by the staff members to try to get the buddies paired off with the regular members of the class under the working and playing conditions provided by the program. It was emphasized, though, that the issue would not be forced. The buddies, too, were counselled individually before they themselves agreed
to come into the class for the summer. Essentially, they were told that the children of this class had certain behavior problems over which they have no control. The school staff is trying to help them overcome these problems, but they are adults and cannot do this without the help of children like them. The point was stressed that children can sometimes give each other more effective help than adults. These children especially needed someone to play and work with - someone who will be understanding with them.

E. The Learning Program

In order to try to establish some sort of a relationship among these mixed children, it was believed that something more was needed than carefully selected buddies and their leadership qualities with peers, their apparent ability to be true friends and their love of the outdoors. It was decided that this should be the learning program for want of a better term. A program of outdoor education was decided upon for several reasons. First, the outdoors are abundant in the availability of living things for study and for play. The children in the class with emotional involvements all seemed particularly fascinated by plants and animals, more especially animals. It seemed to the staff that
any kind of a moving, living thing could become something for them to identify with. They could establish very few relationships with other children. This was perhaps because they had so often been shunned by others for their sometimes bizarre, but always unusual behavior.

With the help of the staff members and the student leadership of the buddies, it became possible to initiate quite effective group learning situations.

Visiting farms, hatching wild duck eggs, hatching turtle eggs, hiking on trails to find and observe wild animals should then become a media or a process in which they could establish intense motivation. Second, the children
of the special class were generally very energetic and some were hyperactive. It is difficult, of course, for children to establish relationships with other children when they are constantly on the move, flailing from one activity to the next. The outdoor program of hiking in trails and through the woods and the planned physical education activities was designed to sap so much energy from the participants that they ought to have been more relaxed and, therefore, more receptive to personal relationships. Third, children with emotional handicaps should, perhaps, gain familiarity with the outdoors so that outdoor activities will become a way of life for them - a form of permanent therapy in which they can participate on their own.

To make use of the learning program as a process for developing social relationships, a tentative curriculum was devised in the beginning of the term. It was not possible to complete all planned activities, but there were always enough activities planned, both short term and long term, to use curriculum activities as a process in activating social interactions between the buddies and the regular class members. Appendix B describes the outdoor education program in greater detail. The daily activities were designed in such a
manner as to promote the ultimate in one-to-one relationships.

Generally, the Social relationships between the buddies and the regular class members remained distant but the stabilizing influence of the buddies on the other children was very strong.

When wild raspberries were picked, buddies shared a common receptacle. A common net was used by buddies to catch insects. Problems of nature were posed in consistent manner as to foster diad formation.
F. Facilities Used

Brainerd, Minnesota, is located in the heart of the lake and forest country of central Minnesota. It is located five miles from the edge of Crow Wing Memorial Forest, approximately 13,000 acres of near virgin habitat. It is owned by Crow Wing County and leased to the Brainerd Area Vocational and Technical School. This school operates the area as a laboratory for post high school technical training in general conservation, Park Ranger, Fish and Wild-life Technologist, Forestry Aides and Game Wardens. Located in this forest is a Lodge operated by The Exchange Club of Brainerd which operates a Ski Area during the
winter months. This Lodge has 1,000 square feet of open space and unlimited use of this facility was granted by the club. The Lodge is surrounded by nature trails, lakes, waterfowl mating areas, many kinds of wildlife (fox, bear, racoon, deer, etc.), wildlife habitat, picnic areas, bird watching stations, wild berry patches, etc. More than twenty miles of the Mississippi River shoreline here has no human habitation. This describes the day camp area to which these children were transported daily for the learning program to be activated.

The area of the day camp was abundant in plant and animal life as well as in the beauty of nature.
G. **Evaluation**

The major objective of this project was to test the effectiveness of pairing off emotionally handicapped children with normal children to (1) see whether compatible social relationships can be made possible, (2) see whether more socially acceptable habits can be accomplished through the buddy system, (3) try to measure the extent of knowledge gained through such shared experiences, (4) try to measure the effect of close adult supervision by both subject-matter oriented personnel and a master teacher with advanced training in dealing with emotionally handicapped children on the handicapped children’s accomplishment incentive, (5) measure the effectiveness of the outdoors as a classroom, (6) create a desire in buddies to appreciate each other—especially for the buddy to appreciate and accept the weaknesses of the emotionally handicapped child, and (7) to see how much preparatory work in social relationships could be done to get the handicapped children ready for at least partial placement into a normal classroom.

Admittedly, this was an ambitious undertaking. No previous studies of this nature had been reported. This necessitated structuring our own evaluative instruments as well as our own curriculum. The following devices
and techniques were used with varying degrees of success:

1. A Social Preference Scale as explained in Appendix A. This instrument was used for selecting buddies to be placed into the room. It was also administered to the members of the class two weeks before they met their buddies, immediately following the end of the summer term and again six weeks later when the group of emotionally handicapped children were in their class during the regular school term away from their buddies. Every time they selected their role players, they were instructed to give a role to anyone they now know or have known at one time. The instrument was used before the special classes started in order to have a point of reference. It was deemed necessary to determine whether any of them had some rather strong feelings toward certain other children before the experimental program began and then to notice whether there had been any shifts during the program, and finally, see whether those shifts lasted for at least a period of six weeks. The device was also applied to the buddies immediately after the summer program and six weeks later. This instrument was constructed in order to get some evidence of successful social interaction from the children themselves.
2. Structured Interview. This device for evaluation was used in several different forms. First, the parents of the buddies were interviewed. Interview Guide A was used. A copy of this is reproduced in Appendix C. The interviews, in all cases, were kept at an informal level and the questions were asked indirectly. In the case of most of the children, the questions were asked and discussion was directed in the direction of the questions while the interviewer and interviewee were working together on a puzzle. The parents of both groups were interviewed for evaluative purposes during the last week of the experimental program and again six weeks following the completion of the program. As can be seen by the nature of the questions posed, an attempt was made to gain insights into possible behavioral changes in these areas: (a) social relationships between the various group members, (b) children's reaction to the daily activities, (c) children's interests and knowledge gained in nature study, and (d) the carry-over of behavior changes through a six week period, at least. Second, the children themselves were interviewed - both buddies and those of the special class. This interviewing was also done.
during the seventh and eighth week of the program
and again six weeks following the completion of the
program. The interviewing was designed to glean
from the responses any clues or outright statements
reflecting upon the effectiveness of the pursued
objectives. Interview Guide B found in Appendix
C gives the text of the factors evaluated. The
spaced interviews with the children were also
designed to measure the long-range effect as
well as the apparent immediate effect upon the
behavior of the participants.

Third, the staff members were interviewed
for their reaction to the entire program. In-
terview Guide C (appendix C) was used and it was
designed to gain teacher observation in all areas
of concern of this study. This interview also
covered the regular school term teacher of the
special class who was not involved in the summer
experimental program. What was wanted here was
some indication that the children were still talk-
ing about their summer experiences - particularly
some interpersonal relationships.

3. Advisory Board. This board consisted of research
specialists in the immediate area, but independent
enough from the project to offer vital suggestions
regarding the procedures used - particularly in relationship to the manner in which human subjects were used in an experimental setting.

**H. Findings of the Study**

The findings of the evaluation procedures are given here in conjunction with the objectives of the program. Each objective is weighed in relationship to any noted behavioral changes.

1. Was there evidence of compatible social relationships between the buddies and the special class members?

The Social Preference Scale described in Appendix A along with classroom teacher observation helped to select some very excellent and mature children in view of their age. Table I on the next page shows the high rate at which they were chosen by their classmates to act out certain roles. In the case of Buddy number two, for instance, all but two of the girls in her room saw her as someone who liked everybody and was liked by everybody. She turned out to be a very outstanding young girl in her relationships with all of the children in the program. It is interesting to note, however, that this image does not hold up in this program. This may be due in part because of the directed effort to pair
TABLE I

Number of Roles of Social Preference Scale for Which Buddies Were Selected by Their Classmates

<table>
<thead>
<tr>
<th>BUDDIES</th>
<th>ROLE NUMBER ON SOCIAL PREFERENCE SCALE *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
<tr>
<td>1</td>
<td>5 8 0 5 0 12 9 0 6 1 11</td>
</tr>
<tr>
<td>2</td>
<td>11 12 0 15 0 9 6 0 14 0 7</td>
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<tr>
<td>3</td>
<td>6 5 0 8 0 12 5 0 8 1 9</td>
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<tr>
<td>4</td>
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<td>7 8 0 8 0 6 4 0 9 0 3</td>
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<td>6</td>
<td>3 4 0 5 0 11 3 0 4 3 8</td>
</tr>
<tr>
<td>7</td>
<td>7 10 0 12 0 10 3 0 9 0 11</td>
</tr>
</tbody>
</table>

This chart shows the number of children in the home room of the buddies who gave them first choice in the various roles. The largest total enrollment of any one class participating was 29 and the smallest was 25. The number of boys and girls were about equally distributed. The children could assign roles only to members of their sex, which means that the highest possible score on any role might be about 15.

* See Appendix A for a copy of the Social Preference Scale.
up the children so that contact with the total group is kept at a minimum and the buddies had certain responsibilities. Yet, she came through very strongly with the buddy ratings, but hardly penetrated the special class members. But, she did come through to her own paired assignment, listing her in all of the positive traits, none of the negative traits and generally giving a good and realistic impression of her in view of the roles she would assign her in a class play. The teacher interview indicated, though, that no clase relationships could be established between this pair in the sense that the special class member constantly broke away from her buddy and attached herself to other special class members - particularly a boy somewhat younger than she. It seemed to be generally true that the members of the special class came to look upon their buddy in much the same way that the buddies' classmates rated them. That is, they saw in their buddies the same strengths which their buddies' normal classmates saw, but they were not drawn to each other socially. They played together and worked together as long as the staff used every possible means of getting them together, but as soon as the artificial stimulants were removed, they reverted back to their shaky relationships with each other, leaving the buddies to do their thing. In the case of the negative roles of the Social
Preference Scale (Roles three, five, eight), this same pattern did not hold up. The special class members did notice and were affected by those buddies who appeared to them to have a high opinion of themselves or who could play the part of a cruel boss. In no case did they recognize this trait in their own buddy - it was always somebody else's. It would also appear that the buddies were more critical of the special class members and assigned them more negative roles than they did to themselves - an indication that they had the ability to remain objective about the whole matter rather than blaming themselves for scenes caused by the handicapped.

2. Were More Socially Acceptable Habits Developed As A Result of This Program?

The Social Preference Scale was not a very valuable instrument in evaluating this aspect of the program. The interview with both sets of parents likewise produced no conclusive evidence. That is, if there was a behavior change, it was not sufficient to have noticeably carried into behavior at home. The parents unanimously reported that the children enjoyed the summer classes immensely on the basis of their comments at home and during informal play, but they could see no appreciable improvement in social habits.

The staff members were not too sure. There were
moments when the paired relationships were operating very smoothly - much more so than would ever occur if the special class members were working among themselves only. But the staff also noted that the relationships were not natural as it was hoped they would be. They were more like those of brothers or sisters where there is considerable age difference. The exception to this seemed to be the two cases who had not penetrated the social barrier at all prior to the program. In one case the number of tantrums the child had were reduced dramatically during the summer. Both of them pretty much continued to live in their own world, not being too concerned about events outside their hull, but some evidence seemed apparent to the staff members that these cases were developing some habits of social awareness which was not apparent previously.

The six weeks follow-up interview with the staff member of the special class revealed a very decided improvement in one case as evidenced by reduced tantrums in formal and informal activities and in his associations with other children. This case, from the start of the school year, made a dramatic change from playing exclusively alone to playing in the presence of other children and even joining others in group activities although not communicating with them verbally.
3. Was There A Gain in Knowledge of Nature?

No direct measuring device was used with the children to measure knowledge or understanding before or after the program. The interview with the parents brought out most markedly the knowledge and understanding of wildlife that resulted from this program. There was one incident, for instance, where a snapping turtle which had been captured by the class and brought into captivity got into the ducklings and snapped off a duckling's leg. Thereafter, he became known as Stubby and continues to be a pet of the children of the room. Of course, the learning by the buddies and their reaction to the program was most impressive. Everyone wanted to be in the program again. The handicapped seemed to gain more understanding and appreciation for things of nature rather than accumulate factual knowledge. The staff members indicated that the buddies were invaluable in providing leadership to the scientific approach to investigating nature. When the special class children were left on their own, they would hop from one activity to the next with no apparent plan of attack. The pairings gave some stability to the learning experiences even though it was difficult to keep them working together. A planned attack for learning, in the opinion of the staff members, occurred much more
often and for longer periods of time under the buddy system than it would have occurred had the handicapped children been left to an individualized program completely. The follow-up interview with the regular teachers of the handicapped room indicated a very positive feeling about the learnings of nature which took place. The children frequently refer to their summer experiences and conclusions they have formed regarding the handling and care of wildlife. Identical opinions were given by the parents on the follow-up interview. The children were affected and changed by these experiences.

4. What Happened to the Children's Accomplishment Incentive?

The buddies for this program were not chosen for their scholastic attainment. As it turned out, none were superior students, but all at least average or better. Additionally, each buddy had a high interest in nature. This was one of the criteria for selecting them for the program. The interest precluded the supposition that their incentive for learning about nature was high. The question then became: How well did this brush off onto the special class members? It was hoped that these children might develop a great interest in nature so that this would give them another avenue by which they can enjoy life with themselves and with their family members for all
time. Again, no instrument was devised to use on the children themselves to measure increased motivation. But the interviews generally indicated very positive reactions to the program. The parents of the handicapped children were most impressed by the nature study procedures the children learned during the program - the manner in which they used their powers of observation, how they classified living things, and their comments about the marvels of things of nature. Even the more severely egocentered children seemed to interest themselves more and wanted to find out more about living things and nature, they being constantly on the alert for signs of life. The most striking results came in the interview with the children themselves. They sincerely prided themselves in how much they knew about nature and were not hesitant to say this. All interviews resulted in the findings that the incentive for learning in this one area improved markedly.

5. How Effective Was the Outdoors for a Classroom?
It has long been known that the outdoors make a very effective classroom laboratory for the study of nature. It was more or less a matter of determining whether handicapped children with special learning disabilities were equally able to learn effectively in this kind of an environment, especially in view of their short at-
tention span and their hyperactive nature. All interviews, however, especially those with the children themselves, revealed that it was effective. Even the more seriously and completely self-centered children understood the difference and they liked it. They were ready, in all cases, to go at another session.

6. How Were the Special Class Children Viewed by the Buddies?

The Social Preference Scale of the buddies shows that they viewed their pairs and the special class children with a surprising amount of objectivity. They seemed to size them up with remarkable accuracy and were able — perhaps because of this — to have considerable patience with them. Occasionally a special class student even came through on the positive scales. Mostly though, they were given negative ratings undoubtedly because of their different behavior in social situations. The interviews with the parents and staff at the close of the program substantiated this view. Relations, at times, between the pairs became strained because the buddies were ready and anxious to get at the job at hand while their pairs held back, or behaved in a manner that was unacceptable to their more normal behavior. With but few exceptions, the staff members were able to change plans or activities so as to relieve anxieties.
In general the buddies remained somewhat aloof, seemed
to understand what needed to be done and waited until
the next time around. No responses to the interviews
gave indications of strong negative feelings coming from
the buddies to their pair and mild feelings of antagonism
were apparent in the direction of the pair to his buddy.
No feelings came out at all in the follow-up interview
with the staff members, parents and children regarding
the feeling of the special class children toward the
buddies. They were not mentioned. But several of
the parents of the buddies indicated that their children
had been wondering how their pair was doing in school
this year. The feelings seemed to project from the
buddies to the special class members, but reciprocal
feelings were much less apparent. The special class
members seemed to be too self-centered to interest
themselves greatly in the lives of their buddies.

7. What Contributions Did This Program Seem to
Make in Getting Special Class Members Back
into Normal Classrooms?

The primary objective of the program, of course, was
to prepare the way for the special class children to
ultimately be placed full time into the regular classes
of the public schools. It was recognized that some
children would need special part time or full time
placement for most of the elementary school years, at least. These were cases b and g. Case b is a hyperactive child with suspected neurological deficiencies of unknown origin. He is under drug therapy at the time of this writing with deteriorating mental abilities. His IQ has dropped 15 points in the last six months and his academic learning rate at the present time is very low - almost non-existent. Nevertheless, he made enough progress on the social preference scale to move from no penetrations with others to where he developed a critical attitude toward Case g during the summer program and this attitude continued six weeks after the conclusion of the program. The parent noticed some social awareness awakening during the program and the staff members reported that he was responding in very small measure. It is difficult to say what made him so anxious to come daily, as reported by the parents, for he was doing no more than tagging along and when he communicated he wanted to know how far away the group was from lunch break time. This child has a long way to go and medical therapy may become his best hope eventually.

Case g was diagnosed as a case of infantile autism. At the beginning of the program he was a typical case with his syndromes. He did not relate to the others. He obviously enjoyed going wherever they went, but he main-
tained his distance, traveled alone while exploring and he did not communicate with the others. When forced into more social situations he went into tantrums. This phase of his behavior reduced markedly during the program. He was folded into group activities and on several occasions moved into paired activities for brief periods of time. When he did have tantrums they were of much shorter duration and occurred much more infrequently. This change in behavior has held up. He will now occupy his own desk in the classroom, he does very well in classifying objects and discriminating letter forms and sounds, he has learned many sight words - more than the teachers are anxious for him to recognize at this time - and shows exceptional ability in number relationships. Occasionally there are actual oral communications between him and Case C and he will occasionally reply in sentence form to a question. This is considered to be excellent progress and the special summer program is credited, in part, for it.

Case f has been integrated into a regular classroom situation and adjustment there is satisfactory. Of all of the special class members in the summer program, she responded best to the social interactions, but did not respond too well to her buddy because of suspected inferior feelings she had toward her.
A very interesting development took place with Case c. She is diagnosed as perhaps being a child with childhood schizophrenia. Under very guarded situations she would talk about very bizarre experiences in a garage and when things got too tough for her she would simply put her head between her knees and start rocking. She responded very well to her buddy, a very gentle little girl and an excellent relationship developed between the two. They never went exploring with the same drive that the others did, but participated more in little girl activities. She has not been seen in a depressed state since about the middle of the summer program. She converses freely with her classmates and attaches herself to the various class members at different times in meaningful social relationships. It has largely been she who has maintained communication with Case g. She is now six years old and is beginning to develop a learning rate and is socializing very well. The treatment she has received plus her placement into a foster home have all contributed to the building of various stress units. Integration procedures can be started in her case within a year and a half or so.

Case a dropped out of the program after two weeks. The family moved away. Case g was the one case who should have improved the most. His learning disability
does not appear to be too severe. He is hyperactive coupled with impulsive behavior. Most of it is centered around his view of himself. He thinks that everybody has it "in" for him so he proceeds to get "even" with them before they have a chance at him. It is considered to be a behavior disorder which would be severely compounded in a normal classroom situation, but which can be tolerated more and treated better in a small group. He was paired with a buddy with a strong personality and there were more personality clashes than ought to have been. He is very difficult to pair up because his behavior becomes so intolerable to any normal or abnormal child. Surprisingly, though, the staff members indicated the greatest progress for him during the program. They felt that he enjoyed the program very much and this was verified by the parents. His impulsive behavior was markedly reduced and the parents also felt that he was getting along better in the neighborhood. There was some deterioration in the follow-up but also continued over-all improvement. Additional maturity and another summer program with a better buddy match should help to get him into integration procedures.

I. Discussion of the Findings

The matter of developing compatible social relationships between the buddies and the special class members
in so short a period of time is difficult to assess. The buddies turned out to be very superior children in social maturity. They had no problems of consequence of their own to sap them of their energies to pursue other activities, including carrying the role of being a leader of a troubled personality. This deprived them of much of the fun of exploring nature with a friend, for it was not possible in any matched pair to develop anything resembling a friendship except, perhaps, Buddy number five and Case c. So what is usually thought of as a friendship relationship did not exist. The differential in social maturity within the pairs was simply too great. There always seemed to be hanging over the relationship the knowledge - though not expressed by either party - that the one is far superior and the other is far inferior. This is a relationship which, actually, only an unhealthy personality can tolerate anyway. But does the fact that a friendship of this sort can hardly be established at this age level take something away from the ultimate goal? It does not seem so. Basic to any friendly relationship among children must be some reasonable and tolerable social behavior on the part of both parties. The buddies had this - based on the standards of normal behavior. The special class cases did not. The problem for the latter, however, is that they have not
learned what social behavior is all about. They had to be removed from regular classes because they were too disruptive to their peers. They have no playmates in the neighborhood because they are avoided by their equals. Parents in the neighborhood refuse to let their normal children associate too much with these cases because they believe their children are not strong enough to rise above their models. Even their own parents are consciously or unconsciously showing strong disapproval of their behavior. Where, then, are they going to learn this behavior? It must come from adults or from other children. The special class provides very little in the way of model behavior from other members, but it does reward acceptable behavior - still without a model.

It seemed to the staff members, the parents, and the evidence gleaned from the Social Preference Scale that this model was provided very effectively by these buddies. The special class cases did not project a particular friendship toward their buddies, but it was a sort of respect for them. In the case of two buddies, at least, the children seemed to develop the attitude that they would like to be that way some day, but right now it's a bit too much.

The question arises whether more acceptable social behavior resulted from this pairing on the part of the
special class members. On this point the parents could
cite no evidence that there might indeed have been be-
havioral changes and when the special class members
themselves continuously withdrew from their paired
relationships to mongle with their own class members,
this matter had to be seriously questioned. However,
the fact that four of the buddies appeared on the social
preference scale done by the special class members six
weeks after the program would certainly indicate that
their influence was felt very strongly. They were given
roles - all of them positive but ones - by four different
members of the special class and the positive roles were
not all given by their pairs. A period of eight weeks is
perhaps too short a time to expect to see great behavioral
changes, but the apparent impact these very sociable and
socially talented buddies had on the special class members
indicated, at least, some sort of penetration.

The staff members, interestingly enough, did not seem
impressed by changes in social behavior, yet all agreed
that a nature study of this kind could hardly be con-
ducted with special class members alone because they needed
the steadying influence of the buddies. This is saying,
in effect, that there was a change in behavior for a period
of time that made nature study more possible, but there was
no evidence of a carry-over when the special class members
were left on their own. This type of a reaction could be
expected and should be considered a positive aspect of the program. It demonstrated that the handicapped children reacted in a manner that is more socially acceptable than their normal behavior and that it was brought about through a natural means of social interaction rather than one forced upon them through direct action by adults. Much of the unusual behavior of these handicapped children probably results from the re-inforcements - positive and negative - which they get as a result of their unique inner drives. It is hoped that the school program during the regular year is effective in reducing or rechanneling those drives, but along with this must come a relearning of behavioral skills and habits which were developed at a time when other factors were more influential to them. It would seem that the presence of the buddies occurred at a crucial moment to most of the children of the special group so that they were able to change from abnormal behavior to acceptable behavior for a time everyday and this is progress.

The matter of whether or not there was a gain in knowledge of nature is also difficult to assess because of the lack of instruments for objective measurement. It is recalled that the staff was interested in creating an appreciation of the things of nature with the special children. This is considered important for their personal
development. Emotionally handicapped children need all of the help they can get to direct themselves away from their own - often shattered - selves to other people and other things. Although no objective evidence shows improvement in factual knowledge of the things of nature, the interviews of both parents and staff members repeatedly brings out the understanding of wildlife that seemed to occur in the children and the awareness of life in the outdoors which came about as a result of this program. The curriculum and staff members were very important to this development, but the staff members and the parents were most impressed with the manner in which the children would approach the problems of nature. This was attributed by the staff members to the models set by the buddies more than by any other factor.

The effectiveness of the outdoors as a classroom was so obvious as to make further discussion of that point unnecessary. All data indicated that this was so.

What do the findings have to say about such changes of behavior in special class members as to reassigning them into regular class. This, of course, was a long term objective rather than an immediate one. Some of the cases are very severely involved emotionally and if they can ever be placed into a normal classroom it will be a tribute to all staff members who have ever worked
with them. However, the fact that two cases had made no social penetrations whatever prior to the program and moved from that to the point where they formed an opinion and expressed it about another class member is very remarkable progress indeed. Undoubtedly there were factors at work other than the buddy system alone, but the change in attitude occurred with a human relationship. This, in the opinion of this writer, was the strongest, most encouraging part of the program. The change held up for at least six weeks following the program and it will be interesting to see whether there will be equal progress in this area during an equal period of time.

J. Conclusions

A paired buddy relationship in which there are highly selected children from normal classrooms placed into an outdoor, eight week, nature study environment with emotionally handicapped children and well qualified staff members showed effectiveness in these aspects:

1. Compatible social relationships were established between the buddies and the handicapped while under staff member supervision, but this did not carry over to free play situations.

2. There was considerable evidence to indicate that socially acceptable behavior by special class members developed for progressively
longer periods of time. The time was too short for this behavior to become habit forming. There seemed to be a drop immediately following the program, but there was noticeable carry-over for the six week observation period.

3. There was a very marked gain in knowledge and understanding of nature and conservation concepts in both the buddy group and the special class group.

4. The handicapped children improved very noticeably in their ability to accommodate to group problem solving and group activities in children, although they were not able to maintain these relationships for any acceptable periods of time.

5. No immediate and marked change of behavior occurred to allow transfer of a special class student into a regular class.

With regard to the buddies, it is concluded that children of such social maturity between the ages of six and nine, cannot tolerate the emotionally handicapped as friends, but they can enjoy a learning program such as this and be good models of behavior.

K. Implications for Future Study

The greatest limitation of this study was the relatively short duration of the day school. It had to be
limited to eight weeks because even a subject as im-
portant and interesting as outdoor education can get
tiresome to children. An afternoon program consisting
of recreatory activities, such as fishing, could be added
to a study such as this in order to lengthen the time
of contact between buddies and the handicapped. Whether
this would strain the relationship between the pairs too
much would have to be determined. Strained relationships,
of course, cannot be tolerated in this kind of program.
It would be far better not to have a program at all. The
exception to this is the kind of emotional involvement where
children pull away from reality and wrap themselves up in
their own selves. This would include the autistic type
of child and perhaps the schizophrenic. One of the best
forms of therapy here seems to be to force the children
into social relationships. They must become aware of
others, communicate with them, feel with them and play
with them - even fighting with them would appear to be
better than to have no contact at all. It would seem
that these children should be matched with a different
kind of buddy. In this study two children developed a
dislike for others. This was something that had never
happened to them before. At least they never expressed
a dislike. Is it better for these children to have a con-
flict going with someone else rather than having no pen-
etration at all? An investigation designed to match up a certain type of young personality who would be highly stimulating (perhaps even negatively) to a child who goes it alone completely would be well worth trying.
APPENDIX A

Instructions for Use with Social Preference Scale

This series of questions should get through the maze of childhood relationships in each class to the point where certain names are constantly reappearing as being able to be true friends, have leadership abilities and being the outdoors. Questions three, five, and eight are in there to identify children who may have good outward appearances, but somehow slip into negative identifications. A child's name who appears by these questions should, perhaps, not be referred as a possible buddy. Question ten is in this series for purposes of identifying a very easygoing child. In certain cases, this question might be the final determinant in accepting or rejecting a buddy. Emotionally handicapped children generally seem to draw themselves toward very active children, especially if they themselves tend to be hyperactive. Withdrawn children seem to gravitate toward the more "lazy" type.

Those children should be referred as possible buddies whose names appear most often opposite questions one, two, four, six, seven, nine and eleven, eliminating a child whose name appears opposite three, five, and eight.
APPENDIX A
SOCIAL PREFERENCE SCALE

Name of Student

Boy ______

Girl ______

Pretend that you were putting on a class play so you would have to select different children in your class to play different parts. Write the boy or girl in your room you would pick to:

1. Play the part of a true friend ________________

2. Play the part of a class president ________________

3. Play the part of someone who thinks he is better than everybody else ________________

4. Play the part of someone who is a nice, helpful mother or father ________________

5. Play the part of a cross ________________

6. Play the part of the captain of the team ________________

7. Play the part of someone who usually knows all the answers but isn't smarty about it ________________

8. Play the part of someone who gets into many fights ________________

9. Play the part of someone whom everybody likes and likes everybody ________________

10. Play the part of the laziest person in the world ______

11. Play the part of someone who wants to do nothing but explore plant and animal life in the country ______
Explaination of the Questionaire for the Selection Committee

Questions number one, four, seven, nine attempt to find children who are liked by their peers. Here the children select the one class member of the same sex whom they consider being able to be a true friend, one who is "nice" and understanding much as a mother or father might be. A true friend might also, in the eyes of the child, be one who knows a lot about many things, but he does not remind others of this constantly and he also needs to be someone who leaves the impression of liking all kids and being liked by all kids. There is an underlying assumption here that emotionally handicapped children will have the same impressions of a true friend as normal children appear to have.

Questions two, four, six, seven, and nine try to get at the identification of young children who might have leadership qualities. The children themselves may not be able to identify a good leader at their level, but they are very sharp about recognizing certain qualities in their peers which adults know as leadership qualities. Their idea, therefore, of who would make a good class president in a play, or who would be helpful, as team captain, knows many things without being obnoxious, likes everybody and is being liked, should be valid.

One additional factor is sought in a good buddy for this program and that is to find someone who likes the outdoors.
exploring plant and animal life, hiking through the woods and doing things of this nature.
SOCIAL PREFERENCE SCALE ROLE SELECTIONS BY SPECIAL CLASS MEMBERS MADE BEFORE THE START OF THE SUMMER PROGRAM

Pretend that you were putting on a class play so you would have to select different children in your class to play different parts. Write here the boy or girl in your room you would pick to:

1. Play the part of a true friend
   *o, f, e, o, d, o*

2. Play the part of a class president
   o, o, e, d, d, o

3. Play the part of someone who thinks he is better than everybody else
   o, e, e, d, e, o

4. Play the part of someone who is a nice helpful mother or father
   o, f, f, f, o, o

5. Play the part of a cruel boss
   o, d, e, d, e, o

6. Play the part of the captain of the team
   o, d, e, d, d, o

7. Play the part of someone who usually knows all the answers, but isn't smarty about it
   o, o, f, d, o, o

8. Play the part of someone who gets into many fights
   o, d, e, d, d, o

9. Play the part of someone whom everybody likes and likes everybody
   o, f, f, z, c, o

* Numerals represent Buddies cases 1-7, alphabet represents special class numbers as described in Appendix D.
10. Play the part of the laziest person in the world o, b, b, b, b, o

11. Play the part of someone who wants to do nothing but explore plant and animal life in the country o, d, e, g, e, o

Letters a through g on the right refer to special class cases who were selected for the various roles by the different special class members. "O" indicates no selection made. The case was too detached from the others to display any feelings. When asked there would be no reply, a shrug of the shoulders or staring into space.
SOCIAL PREFERENCE SCALE ROLE SELECTIONS BY SPECIAL CLASS MEMBERS MADE THE SEVENTH AND EIGHTH WEEK OF THE PROGRAM

Pretend that you were putting on a class play so you would select different children in your class to play different parts. Write here the boy or girl in your room you would pick to:

1. Play the part of a true friend
   3, f, d, l, o, 5

2. Play the part of a class president
   3, d, d, l, o, 5

3. Play the part of someone who thinks he is better than everybody else
   6, b, 6, l, g, 6

4. Play the part of someone who is a nice, helpful mother or father
   o, 2, 2, l, o, 5

5. Play the part of a cruel boss
   o, d, e, 7, 1, e

6. Play the part of the captain of the team
   o, 3, d, l, o, 6

7. Play the part of someone who usually knows all the answers but isn't smart about it
   o, f, 2, l, o, 2

8. Play the part of someone who gets into many fights
   a, 6, b, l, o, e

9. Play the part of someone whom everybody likes and likes everybody
   o, f, g, l, o, 2

10. Play the part of the laziest person in the world
    o, l, 1, l, o, b
11. Play the part of someone who wants to do nothing but explore plant and animal life in the country $0, 1, 1, 4, 7, 1$

The numeral in the right indicates roles assigned to class members by the special class members who are cases a through g. Buddies are cases one through seven. Where an "O" appears, it is to indicate insufficient involvement to make a firm choice.
APPENDIX A

SOCIAL PREFERENCE SCALE ROLE SELECTIONS BY THE BUDDIES TAKEN THE SEVENTH WEEK OF THE PROGRAM

Pretend that you were putting on a class play so you would have to select different children in your class to play different parts. Write here the boy or girl in your room that you would pick to:

1. Play the part of a true friend
   6, 3, 4, 7, c, 1

2. Play the part of a class president
   7, ? , 3, 7, 2, 7

3. Play the part of someone who thinks he is better than everybody else
   e, 6, 6, e, 3, 6

4. Play the part of someone who is a nice helpful mother or father
   ?, 5, 2, 3, ?, 2

5. Play the part of a cruel boss
   d, e, 6, d, d, 6

6. Play the part of the captain of the team
   7, 7, 3, 3, 3, 7

7. Play the part of someone who usually knows all the answers but isn’t smart about it
   7, 3, 2, 2, 2, 2

8. Play the part of someone who gets into many fights
   d, e, d, d, d, d

9. Play the part of someone whom everybody likes and likes everybody
   2, 5, 2, 2, 2, 5
10. Play the part of the laziest person in the world 2, 5, 2, 2, 2, 5

11. Play the part of someone who wants to do nothing but explore plant and animal life in the country 1, 7, teacher, 1, 3, 7

The numbers on the right indicate roles assigned to class members by the buddies. Buddies are cases one through seven; Special class members are cases a through g.
APPENDIX A

SOCIAL PREFERENCE SCALE ROLE SELECTION BY SPECIAL CLASS MEMBERS SIX WEEKS FOLLOWING THE PROGRAM

Pretend that you were putting on a class so you would have to select different children in your class to play different parts. Write here the boy or girl in your room you would pick to:

1. Play the part of a true friend  o, 5, n, d, d, o
2. Play the part of a class president  o, o, f, e, d, o
3. Play the part of someone who thinks he is better than everybody else  g, o, e, d, e, o
4. Play the part of someone who is a nice helpful mother or father  o, 5, f, f, 2, f
5. Play the part of a cruel boss  o, o, e, d, e, o
6. Play the part of the captain of the team  o, f, 7, n, 3, o
7. Play the part of someone who usually knows all the answers but isn't smart about it  o, f, f, f, n, o
8. Play the part of someone who gets into many fights  d, d, n, d, 6, o
9. Play the part of someone whom everybody likes and likes everybody  o, 5, 2, n, n, o
10. Play the part of the laziest person in the world

11. Play the part of someone who wants to do nothing but explore plant and animal life in the country

Numerals one through seven indicate Buddy cases selected by special class members: a through g represent special class cases selected; 0 means no selection made and N refers to new special class students who were not in the summer program.
1. The Feasibility of Using a "Buddy" System to Assimilate Emotionally Handicapped Children into the Regular Classroom.

This curriculum will be designed to serve as a process by which emotionally handicapped children will be interacting with buddies of approximate equal age in an outdoor setting. This will be for an eight week period beginning June 3, 1968, three hours a day. There will be six or seven emotionally handicapped children in the program and an equal number of children from regular classrooms selected on the basis of their leadership abilities, to be true friends and their love of the outdoors. The selection of these buddies will be done by their teachers on the basis of their observation and on ratings made by children. The staff leader will be a master teacher. He will have as his assistants a science teacher whose responsibility it will be to select areas of the outdoors which will be suitable to carry out the selected activities which will tend to breed a love for the outdoors and which will provide and stimulate the kind of interrelationships wanted in this program. He will also have a physical education teacher working...
one hour each day to plan physical activities and who will be there to execute these with the children. The physical activities will also be a process to help social interaction in addition to supplying a healthful release of energy.

The format of the curriculum needs to be based on certain fundamental questions: What learning experiences are most conducive to providing a common bond of interest and motivation between children of all behavioral levels? Besides the interest and motivation factors, how can children be mixed - regardless of their unique behavior level - in order to bring about maximum social interactions? This obviates an almost exclusive outdoor program of nature study, living with nature and vigorous participation of all members in concomitant and planned physical activity. If curriculum is to be thought of as a process rather than content, it should concern itself with intellectual, physical and social developmental processes as itemized here:

A. Physical Activities

1. Pair off in daily calisthenics using operant conditioning techniques by pairs. Each staff member has no more than two pairs of children (each pair, of course, being an emotionally handicapped child with his buddy). They will do body exercises that are just difficult enough for them to do but not at the frus-
tration level. There must always be rewards for tasks accomplished and the rewards must come to the pairs, not to all students or a team of students. The object is for the buddy to take his friend in hand sometimes following Physical Education class and work on certain exercises which are geared to develop all body parts.

2. Emotionally handicapped children often have difficulty listening. They become so engrossed in themselves that they shut themselves off from social interaction. Therefore, some physical education must be marching with commands. This must also be done by pairs with the buddies coached to develop their own signal for each command to give to their pairs. For instance, a left turn may mean two quick taps on his pair's hand, so bringing in the sense of touch as well as sound to help these children concentrate on tasks and relate to others.

3. Rope jumping is a must for this program although it need by handled cautiously. The handicapped children will have more
co-ordination difficulties with this. Free
play-rope jumping should be provided so that
pairs can work together.

4. The pairs should work out animal walks and
crawls in conjunction also with nature study.
Others can guess what animals they are im-
itating.

5. Running, jogging, stunts and balances are
all activities to work into the total pro-
gram. These lend themselves well for com-
petition of one pair with another. This kind
of competition must be controlled very carefully
by matching the pairs only if they appear to
have an equal chance of winning.

6. In order to give the buddies some relief
from constantly caring for their pairs, there
should be some low organizational games and
modified softball games which will provide
for recreation and a general team spirit with-
out the usual matched pairs.

B. Nature Study Activities

1. Rock collecting. This area has a wide variety
of interesting rocks. A project should,
therefore, be to go on several excursions to
find rocks. This should become an intellectual as well as a social experience.

Intellectual Experiences

a. Classify rocks according to hardness and softness
b. Classify according to rough and smooth
c. Classify according to color
d. Classify according to shape - round, square, triangle, rectangle, etc.
e. Classify according to fire rocks or sandy rocks

Social Experiences

a. Buddy up children to look for rocks using common containers, taking turns carrying containers.
b. Classify the rocks together in pairs
c. Collect agates

2. Insect Collecting

a. Classify according to whether insects or not (insects can fly, outer skeleton, six legs), according, to color, according to ability to protect themselves beauty and ugly, land and water, b. Make display of identified and classified insects emphasizing the work of the pairs of children.

b. Make insect catching devices so that there will be at least one per pair.

3. Collecting leaves and Wild Flowers

a. Classify according to color, size, shape, veins, smell, and number of stamen keeping in mind always that the intellectual activities here are secondary to whatever real social interaction and involvement may result from them

b. Prepare collections in pairs as with other collections, using reward systems to encourage working in pairs.

Use excess leaves and flowers for creative art projects, making bouquets, reproduce them in paintings, etc.

4. Wild Animal Life Study

a. Make plaster casts of various animal tracks.
5. Study Local Geographical Features

a. Draw maps of the routes to and from the parks

b. Find unattended wild bird eggs and hatch them then release the birds to a local wildlife sanctuary.

c. Find turtle eggs and replant them for hatching.

d. Watch birds for purposes of partial identification.

a. Visit state and county parks making the visits picnic outings.

b. Make one overnight camping trip to a local park

c. Prepare compass problems and take the courses in pairs.
APPENDIX C

Interview Guide A

This guide was used to interview the parents of the buddies and the parents of the Special Class members. The parents were told the purpose of the interview.

1. What is the child's reaction to the program?

2. What parts of the program does he like the best? The least?

3. Does he talk about the activities at home?

4. Does he talk about his pair at home?

Elaborate on the remarks.

5. Have any apparently close friendships developed?


Interview Guide B

1. Whom do you consider to be your best friend?

2. Of all the kids you know, who do you think is the meanest?

3. Would you rather go to a school where there are lots of kids or where there are few kids?

4. Would you rather spend a lot of time with some other kids or would you like it better to be alone all by yourself?
5. Do you like best to work alone or with somebody? Who?
6. Do you like nature?

This guide was used to interview special class members. This was done informally, while working puzzles together or in some way being occupied with an activity.

**Interview Guide C**

1. Give your reaction to the program from the point of (1) How children are interacting with each other, (2) How they seem to like the program, (3) Whether they seem to be developing an appreciation of outdoor activities, (4) Teacher-pupil relationships, in view of the low teacher-pupil ratio; (5) Whether there seemed to be any genuine behavior change, and (6) How the children view themselves basically.

This guide was used to interview the summer program staff.
APPENDIX D

DESCRIPTION OF CASES a through g, THE EMOTIONALLY HANDICAPPED MEMBERS OF THE SPECIAL CLASS

Case a.
A very anxious boy of eight with a very insecure status in his own family. He dropped out of the program a week after it started because the parents couldn't agree about the matter of who was to bring him to the class. They finally moved out of the community.

Case b.
A seven-year-old boy, very good looking, large for his age, and he has gross motor co-ordination difficulties. He is under constant drug therapy to control hyperactivity. He appears to have some sort of a neurological disorder which is at present unidentifiable.

Case c.
A pretty five-year-old girl of average height, now placed in a foster home. She frightens easily and has no tolerance for change or unanticipated events. Her favorite reaction to these has been to place her head between her knees and rock back and forth.

Case d.
A skinny eight-year-old with impulsive and aggressive behavior. He views all children and adults as "having it in" for him. Co-ordination is poor and he has perceptual disturbances.

Case e.
An aggressive eight-year-old with average physical development. Pushy and shows violent reaction to ordinary social contacts.

Case f.
An attractive nine-year-old girl who is smaller than normal and is underweight. She appears to have cognitive disabilities with suggestions of aphasia. There is an abnormal craving for affection.
Case g.

A five-year-old boy of average weight and height. Relates to objects rather than people, uses language on a limited scale, acts out in tantrums when routines are changed. Does very well those things which he wants to do.

All of the children fall within the normal limits of intellectual ability subject to the limitations of the evaluative instruments.