The purposes of this study were to custom make a reading readiness program for a group of kindergarten children and to compare their progress with that of a second group. A pretest was administered to all of the children and then each child was grouped according to his or her needs. Two classes were involved in the study, one labeled control and the other experimental. In the experimental class the children were retested and regrouped according to their needs at two-week intervals. The children in the control class remained in the same groups throughout the program. At the end of the study a t-test was used to compare gain scores of both groups. The results of this study support the hypothesis that children in a continuous regrouping program will achieve greater success in performing reading readiness skills than those who are exposed to a non-regrouping program. Although both groups made significant progress, the gain scores of the experimental group were considerably higher than those of the control group. Based on the findings of this study, and from the findings of previous research, it is recommended that this method of grouping be implemented in other kindergarten classrooms. (Author)
A CONTINUOUS REGROUPING PROGRAM IN READING READINESS SKILLS FOR KINDERGARTEN

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ABSTRACT

A PROGRAM OF CONTINUAL REGROUPING IN READING READINESS SKILLS FOR KINDERGARTENERS

The purposes of this study were to custom make a reading readiness program for a group of kindergarten children and to compare their progress with that of a second group.

A pre-test was administered to all of the children and then each child was grouped according to his needs. Two classes were involved in the study, one labeled control and the other experimental. In the experimental class the children were re-tested and regrouped according to their needs at three week intervals. The children in the control class remained in the same groups throughout the program. At the end of the study a t-test was used to compare gain scores of both groups.

The results of this study support the hypothesis that child in a continuous regrouping program will achieve greater success in performing reading readiness skills than those who are exposed to a non-regrouping program.

Although both groups made significant progress the gain scores of the experimental group were considerably higher than those of the control group.

Based on the findings of this study and from the findings of previous research, it is recommended that this method of grouping be implemented in other kindergarten classrooms.
A CONTINUAL REGROUPING PROGRAM IN READING READINESS SKILLS FOR KINDERGARTEN

INTRODUCTION

Since Children are reared differently in a great variety of home environments, they come to school with different behavior patterns, interests, attitudes and levels of readiness for formal learning. Because of these differences schools resort to collecting children into grade-levels and grouping by ability within those levels. (16:pp. 54 and 55)

To quote Virgil M. Howes,

"There is no single theory of learning-there are many. All children do not learn in a single way nor to the same degree. They differ in how they learn, how much they learn and how adept they are at using what they learn." Howes (.14)

To ignore the fact of divergent living styles is both inefficient and wasteful of teacher time and student effort.

Custom-tailoring learning experiences is one way to cultivate these differences and to accelerate learning and reduce failure. For many years educators have been aware of the unfairness of the "same for everybody" theory and have adjusted their curriculums to accommodate each learner. One way of adjusting comes in the form of grouping children by need. Dorothy Westley Gibson cites four purposes of grouping.

1. To diagnose and evaluate individually what children learn and how they learn it.
2. To teach children, placing particular emphasis on their individual abilities, achievement, and interests.
3. To give individual children particular attention and recognition designed to help them see themselves as learners.
4. To help children learn effective group participation. (.29)
The program in this study provided for continual regrouping based upon the results of reading readiness diagnostic tests. The problem was to determine whether or not kindergarten children in a continuous regrouping program achieved greater success in performing readiness skills than those who are exposed to a traditional non-regrouping program.

METHODS OF RESEARCH

The following sequence of reading readiness skills were chosen for instruction: visual discrimination, alphabet recognition, word matching, rhyming words, and beginning sounds.

Two groups of children were used from two very similar kindergarten classes taught by the same instructor at Bethune Elementary School in Gary, Indiana. The experimental class had thirty-five enrolled of which twenty were boys. The control class had thirty enrolled of which eighteen were boys. Children had been randomly assigned to the two groups. Children in both groups were given a pre-test on each of the dimensions and placed for instruction in each skill independently according to their needs. The instruments used for evaluation and diagnostic purposes were Cylmer-Barrett and Brown-Manning tests.

At the end of each three week period, however, the children in the experimental class were retested and regrouped according to their needs. The children in the control class were not retested until the end of the study at which time the scores of both classes were compared.

The reading materials used were identical for both the experimental class and the control class. They included Alphatime, First Step of the A B C Program, Getting Ready to Read, Mini Systems, Peabody Kit and the Sullivan Series.
After the initial testing the children in both classes were grouped into six categories: The first group was placed primarily in Getting Ready to Read and Mini Systems for letter sound associations and in Sullivan for reinforcement in letter recognition. The second group was placed in Sullivan for drills on rhyming words and in Alphatime for reinforcement in letter recognition. The remaining four groups were placed in First Step and Peabody Kit for visual discrimination, in Alphatime and Mini Systems for letter recognition and in Sullivan for rhyming.

The instructional procedures during the 21 week program were the same for both classes with the exceptions of the retesting and regrouping in the experimental class every three weeks. Reading readiness skills were taught two hours a day for four consecutive days on alternate weeks. On the fifth day the children were given a free day. On this day the children chose their own activities. Filmstrips, art supplies, popcorn and poppers, an ice cream freezer, a surprise box, a record player, a cassette recorder with tapes and assorted games are examples of the materials provided for them to choose from. The next school day was reserved for retesting and regrouping followed by four days of instruction in science, social studies and math.

During the first six weeks the groups in the experimental class were so varied that scheduling them for instruction was very hectic for the teacher and somewhat frustrating for the children.

SURVEY OF RELATED RESOURCES

Many educators have devised special programs for learners of all ages. Most of the programs are in the areas of grouping or individualizing to improve instruction methods.
Piggins (21), an inner-city school teacher, devised an individualized reading program for her class and was thrilled by the results she obtained. Each child was scheduled for a conference on Friday to make a contract for the following week. The contract listed specific reading activities the child had agreed to complete. If someone completed his contract ahead of time, he had the option of working on another contract or reading books for the "Golden Book Contest." At the end of each month, the child who had the most books would win a Golden Book for himself. By June all of the children had shown marked improvement in reading and daily work although not all were reading at grade level.

Holliman (13), a third-grade teacher, decided to take individualization one step at a time. The children did all of the work in their basal texts and workbooks but at their own rate. As they finished the textbooks they went into true individualization. This method of gliding into individualized reading was proven to be successful for over a period of several years. The children became prolific readers. They read great quantities of books. Their comprehension and reading levels improved and they became truly excited about reading.

Thompson (27) undertook an evaluative study of Program for Learning in Accordance with Needs (PLAN) in Wethersfield, Connecticut. The objectives of PLAN were to move the educational process toward individualized instruction and to shift the role of the teacher to one of being a facilitator of learning. PLAN was found to be effective in increasing the amount of individualization in primary-grade classrooms but its greatest success was at the highest grade level studied, third grade. It was effective in moving teachers away from whole-class teacher-dominated patterns toward increased
attention to individual pupils but ineffective in reducing the managerial tasks of teachers in the primary grades.

Selecting an approach to individualized education which will work best for a specific school corporation or school is a big problem for some educators. Eckert (10) has devised an uncomplicated model as a basis for matching goals of the school with the goals and strengths of various systems of individualized instruction. It compares school versus pupil selection of learning objectives and school versus pupil selection of media for achieving the learning. When the school selects both the learning objectives and the media for attainment the category is termed Individually Diagnosed, and Prescribed Learning. When the school determines what is to be learned but allows the learner freedom to determine how he will attain the objectives the category is termed Self Directive Learning. In situations where the learner selects the objective but the media are determined by the school, the category is termed Personalized Learning. If the student selects both what is to be learned and how to learn it, the category is termed Independent Study.

Individualization has been proven to be successful in many instances but this method is not always practical or necessary for maximum educational success. General acceptance of the idea that we need to recognize individual differences and "take students where they are" is encouraging. However it is the opinion of Rodney Tillman (28) that many of the schools now operating individualized instruction programs are doing so with a "pre-model T" version. From a practical standpoint, it would be impossible, in many schools, to initiate versions beyond the "Model T", as these require considerable expenditures.
Grouping is an alternative solution to the problem. It is an accommodation to improve learning efficiency. Some variations of newer grouping plans are (1) team teaching, according to its adherents it was facilitated greater individualization of instruction, (2) flexible scheduling, student groups are divided into large groups and individual study. Teachers plan what they want to teach, where, for how long, and with what results. These demands are fed into a computer which produces a schedule hand-suited to these needs. This method has been found to be superior to fitting students into predesigned schedules. (3) multi-age, in this program classes are organized on the basis of planned heterogeneity instead of planned homogeneity. Children are able to progress in a more continuous fashion without any consideration for being held back or double promoted.

Bush and Allen (1) have tested a design for high school education, using computers to generate individual and class schedules. The consequences have been a definite break with traditional forms of organization and teaching. Bush and Allen assume that all students should have continuous, rigorous study in breadth and depth of all basic subject matter fields through the six secondary school grades, and that in each subject there are several groups of students whose needs are sufficiently distinct as to require a discreet programme of studies. Four types of instruction were planned: independent and individual study, small group, laboratory and large group. Class size, length of class period, and the number of classes were planned to vary with the nature of the subject, the type of instruction, the level of ability, and the interest of the pupils. The proportion of time devoted to a particular subject, the distribution of that time, the nature of the subject matter are varied according to the needs of each
individual and to the social demands that his goals aspirations, abilities, and circumstances require.

Wiles (30) investigated a multi-age grouping program initiated by three elementary teachers as a means of individualizing instruction. In September of 1969, ninety (90) children were randomly selected from the 180 children who were in third, fourth and fifth grades. These children were placed in three adjoining but separate classrooms. Approximately ten 8-year-olds, ten 9-year-olds, and ten 10-year-olds were under the guidance of each of the team teachers. The research design called for gathering data through systematic observation by the teachers, student and parent evaluations, and application of various objective measuring devices. Data were sought relative to positive or negative change in self-concept; interactions among children within each of the three groups, and between children from different groups; academic growth; and teacher attitudes toward the cooperative planning required by the nature of the program. The team feels there are two keys to the success of the program; the increasingly closer-relationship as they involved themselves with the lives of the children, and the continued support of the administration.

Mitchell and Zoffness(19) developed, organized and coordinated a pilot educational program in their school with emphasis placed on the socialization, as well as the academic process. The program was based upon the philosophy that children have varied interests and have positive social relationships with children who vary in age and that friends are chosen on the basis of similar interest and emotional needs. Throughout the year, the children chose where to sit and with whom to work, regardless of age or grade level. As a result seating arrangements changed as new student rela-
tionships arose in the classroom. In addition, children were free to use any material that was relevant to their needs without regard to the level of the materials, the common factor being only a shared interest in the topic. Achievement tests were administered to the multi-age class and the self-contained classes in the school. The statistics show that academic growth was greater in the multi-age classes.

Bozym (2) designed a multi-age program for K-2. Kindergarten first and second grade children were randomly assigned to five home classrooms. Home classroom teachers are responsible for "administratrvia", parent reporting, learning diagnosis and related matters for the 30-35 students in their rooms.

Each child spends two hours (one in the morning and one in the afternoon) engaged in activities geared to his ability level at the learning centers of his choice. For the rest of the school day he works in his home classroom, where individualized instruction is given in small groups. There are six learning centers: language and library, math, science, home community living, art and music, and physical education. The centers are in the home classrooms. Thus a given room will contain special equipment required for whichever center it houses instead of the traditional science table, book corner, etc. Responsibility for the centers is on a rotating basis with teachers moving to different centers every week.

Hard data to positively support the K-2 program has been slow to come by. Though standardized tests don't measure such things, teachers feel that children have developed more positive attitudes toward learning and that self-concepts are healthier.
McIntosh (18) investigated the relative effects of three different grouping procedures (heterogeneous, homogeneous, and flexible) on the academic achievement of disadvantaged primary school children. All 260 pupils were randomly assigned to one of three treatment groups taught by nine teachers. The conclusion from the two year study was that there were no differences in academic achievement attributable to the three different grouping patterns employed.

Eberwein (9) compared two types of classroom organizations for reading instruction to determine if there were significant difference in reading achievement and reading class attitude between the experimental group, which used a flexible plan for grouping for reading instruction. No significant differences was found. It was concluded that the three group achievement plan did as well as the flexible grouping plan and less time was need for planning and implementation.

Yates (31) searched into the effects of regrouping pupils according to sociometric choices, thereby comparing the influence of different forms of choice realization variation and stability of the pupils' choices in repeated sociometric experiments.

Obtained results seem to give good support to the theory that a realization of the pupils' choices through different forms of group formations increase their experience of their companions and sharpens their social evaluation of each other (32:237)

SUMMARY

All of these research findings support the idea that children learn more, and at a faster rate when programs are devised for them on a personal basis. In each study there was noticeable gain in pupil progress after a systematic
technique was implemented. It should be noted that in almost every project the program was designed by classroom teachers who had their particular group in mind.

In each study the techniques varied but the common overall goal was to improve the intellectual growth rate of the children involved. In general it could be concluded that one of the underlying reasons for the success of these programs is the fact that the children involved had some input into the project.

RESULTS AND ANALYSIS

The findings of this study indicate significant gains in each of the areas tested. The results of the "T" test for equivalence comparisons of experimental and control groups on the pre and post-tests are presented in Table 1. The test results on rhyming words showed the only significant difference at the beginning of the study. This was in favor of the control group. On the other hand, the test results on visual discrimination showed the only insignificant difference at the end of the study. All others were in favor of the experimental group.

TABLE 1. Comparison Between Control and Experimental Groups on Pre- and Post-Tests.

<table>
<thead>
<tr>
<th></th>
<th>Pre-Test</th>
<th>Post-Test</th>
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<tbody>
<tr>
<td>Visual Discrimination</td>
<td>T = .04</td>
<td>Perfect scores for both groups</td>
</tr>
<tr>
<td>Uppercase Letters</td>
<td>T = .01</td>
<td>T = 5.7 **</td>
</tr>
<tr>
<td>Lowercase Letters</td>
<td>T = 1.2</td>
<td>T = 6.7 **</td>
</tr>
<tr>
<td>Word Matching</td>
<td>T = 1.5</td>
<td>T = 2.2 **</td>
</tr>
<tr>
<td>Rhyming Words</td>
<td>T = 2.5 *</td>
<td>T = 3.2 **</td>
</tr>
<tr>
<td>Beginning Sounds</td>
<td>T = 1.0</td>
<td>T = 8.2 **</td>
</tr>
</tbody>
</table>

* Significant at .05
** Significant at .01
The results showing gain score comparisons for both the experimental and control groups are located in Table 2. The scores for both groups showed significant gains, but the gain scores of the experimental group were double and in some instances triple those of the control group. The slightest gain was in rhyming words and the greatest gain was in beginning sounds.

TABLE 2. T-Values for Gain Scores Between Pre- and Post-Tests

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uppercase Letters</td>
<td>T = 9.6 **</td>
<td>T = 2.8 **</td>
</tr>
<tr>
<td>Lowercase Letters</td>
<td>T = 9.9 **</td>
<td>T = 4.5 **</td>
</tr>
<tr>
<td>Word Matching</td>
<td>T = 14.8 **</td>
<td>T = 10.7 **</td>
</tr>
<tr>
<td>Rhyming Words</td>
<td>T = 8.1 **</td>
<td>T = 12.3 **</td>
</tr>
<tr>
<td>Beginning Sounds</td>
<td>T = 23.1 **</td>
<td>T = 9.1 **</td>
</tr>
</tbody>
</table>

SUMMARY AND CONCLUSIONS

The needs of individual children are so diverse that it is imperative that new methods be implemented that will cultivate these differences and accelerate learning. In an effort to respond to these needs a program of continual regrouping was compared with the traditional non-regrouping method in reading readiness skills for kindergarten children.

Pre-tests and Post-tests were administered to all of the children. These tests included the Brown-Manning which tests visual discrimination and recognition of upper and lowercase letters. The Clymer-Barrett which tests word matching and auditory discrimination-rhyming words and beginning sounds. Both tests are at the kindergarten level.

The pretests were followed by twenty-one weeks of instruction. Since
the only initial difference between the classes was in the area of auditory discrimination, (rhyming words) the class with the lowest score was selected to be the experimental group.

In both classes the children were grouped according to their needs. In the experimental class however, the children were retested and regrouped at each three week interval for the duration of the study. In the control class the children remained in the same groups throughout the study.

"T" tests were used to show comparisons between control and experimental classes on pre and post tests and gain scores between pre and post tests for both classes. The tables on pages 10 and 11 reveal the complete results.

A significant difference favoring the experimental group in all of the areas were found on the test for gains between the groups. A very high percentage of gain was made in the area of auditory discrimination involving beginning sounds.

On the t-test comparing the results of the two groups, the experimental group achieved significantly higher scores than the control group.

Based upon the data in this study the following conclusions were reached:

1. At the beginning of this study the two classes were at the same level academically.

2. The first weeks of the program were observed to be the hectic for teacher and children because of problems in scheduling the activities, however, the anxieties subsided as the children became familiar with the routine.

3. There were fewer discipline problems in the experimental class. It was felt that this was due to the fact that these children were working at their own level with materials that were meaningful to them and were therefore not easily distracted.

4. Although both groups made significant progress, the gain scores of the experimental group were considerable higher than those of the control group.

5. It was observed that the children in the experimental class appeared to be happier about school were absent less often and had healthier self-concepts.
The obvious conclusion derived from this study is that continual regrouping is a much better method of teaching reading readiness skills to kindergarten children than the traditional grouping method.

Based on the findings of this study and from the findings of previous research it is recommended that this method of grouping be implemented in other kindergarten classrooms. Programs like this one will insure greater success for more children.
BIBLIOGRAPHY


