Incorporating various elements of individualized instructional programs and continuous progress plans, a type of open-end education is recommended as a way to enable each child to realize his own potential and make his greatest contribution to society. Aspects of open-end education discussed briefly include a definition of the term (it incorporates nongrading, team teaching, and flexible scheduling), problems with graded schools, use of teacher aides, curriculum patterns, and class and teacher arrangements. A comprehensive proposal for elementary school organization recommends self-contained classes for pupils from kindergarten through the second year level, all-subject-areas teaching teams for pupils in third and fourth year levels, and related-subject-areas teaching teams for pupils in the fifth through eighth year levels. Separate-subject-areas teaching teams are recommended for pupils at the senior high level. A bibliography of 22 items published between 1961 and 1967 is appended. This document was prepared under ESEA Title III. (JK)
OPEN-END ELEMENTARY EDUCATION SPECTRUM
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BY PAUL C. SOWERS nasec monograph series
Mr. Paul C. Sowers, who holds a B. S. in Business Administration from Oklahoma University and a B. S., M. A., and Specialist degree in Education from Northern Arizona University, was involved in both elementary school teaching and administration for several years in New Mexico and in Arizona. More recently he taught in the College of Education and directed the Elementary Training School at Northern Arizona University. Currently he is Elementary Education Consultant at the Northern Arizona Supplementary Education Center.
OPEN-END

ELEMENTARY EDUCATION

by

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published by
Northern Arizona
Supplementary Education Center
creating a climate for change

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INTRODUCTION

Open-end education is, for many schools which have tried it, the solution to a number of extremely important problems. First, nongrading permits children to be taught as individuals of very varied capacities and interests. Second, team teaching permits teachers to work in the areas of their greatest strength. Third, the wise use of teacher aides gives the teams sufficient contact and time to know children as individuals and plan work for the sake of individuals, in carefully selected groups of proper size. Fourth, flexible scheduling gives teachers, aides, and children maximum use of school space and time in the ways best suited to the needs of child, staff, and community.

No child is a container to be filled with facts from spigots. Learning is in the response a person makes to the situations he encounters. The more valid learning situations he finds himself meeting at levels suited to his ability to respond, the more he can change his behavior effectively. And, since learning is basically a matter of changing behavior, the school which serves its purpose best is the school which gives its pupils the fullest opportunity to respond meaningfully to a wide spectrum of valid learning situations.

Open-end education broadens the scope of teacher and student so that apathy and frustration no longer characterize their relationship. Teacher and child accomplish their ends in glad responsiveness because each finds daily fulfillment in his work. Desired student behavior and concepts receive reinforcement from many sources and, because classroom bottlenecks have come unplugged, the creativeness of all involved can come into meaningful use.

Larry A. Stout, Director
NASEC
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1. SELF AND SOCIETY

Education has two primary functions. First, it should meet the needs of the individual. Secondly, it should meet the needs of society. We know conclusively that children differ greatly in intellectual ability, cultural background, physical stamina, emotional stability, and social aptitude. Not only does one child differ from other individuals, but he may vary tremendously in his own capacities from one area of endeavor to another. He may do well in arithmetic, but progress very slowly in reading.

In addition, we live in a society of exploding knowledge and constant, rapid change. The United States is a technological giant in a position of world leadership; consequently, our children must be educated to their full potential, so that they will assume their positions as members of a responsible citizenry and be capable of farsighted leadership.

We must incorporate our knowledge of child growth and development and our knowledge of the world today into a comprehensive, open-end plan of education.
2. DEFINITION: OPEN-END EDUCATION

The term "open-end" is intended to reflect a concept of education which will allow each child to shoot for the stars within the realm of his own aspirations and capabilities. He meets no dead ends or blind alleys, but is given appropriate placement so as to insure continuous progress. He is not forced into unfair competition or judged mistakenly in relation to a nondescript group. His path is flexible, and offers opportunities of success corresponding to his own rate of developing understanding. His motivation is primarily intrinsic and provides a freedom of growth and development compatible with the expectations of a democratic society. The sky is wide and there is a place under it for every individual according to his own greatest worth. This is the kind of educational opportunity that we should offer our children. It is open-end education.

3. CONTRIBUTING FACTORS

The Problem with Graded Schools

If we are to provide an open-end process of education for our children, we must put the horse before the cart, where it belongs. Considerations concerning the child -- the way he grows, learns, and develops -- must be placed before organizational convenience.

The graded school is based on the erroneous assumption that all children of a given chronological age are able to perform at approximately the same level of competence. This arbitrary squeezing of children into grades, with flunking or skipping to adjust the rate of flow, is obviously contrary to much of the knowledge of learning that we now possess. Consequently, as professional educators, we must turn away from inappropriate educational structures and diligently seek out those arrangements which will most adequately meet the needs of our children and society as a whole.

Nongrading

The difficulties of the graded school may be largely eliminated by removing all references to grades and then setting up a situation whereby each child, after careful evaluation and group placement, is allowed to progress through the various phases of instruction according to his own abilities.
His profile chart and subsequent, appropriate placement are not determined by academic factors alone. Due consideration is also given to social, emotional, health, speech, and other problems that might warrant special placement. Thus, by looking at the whole child outside of a graded context, we are able to meet the individual’s needs if we use a flexible, open-end educational plan.

**Team Teaching**

The concept of nongrading is strengthened by being combined with team teaching. This permits greater variety in grouping size and arrangement, more efficient use of school space and time, and better utilization of teacher talents. By proper team planning within a nongraded structure, the overall curriculum may be extensively improved, student opportunities enlarged, and educational goals more adequately realized. Team teaching and nongraded seem to go together as the hand fits the glove. Nongraded opens the door to the students’ continuous progress and team teaching provides the vehicle.

**Use of Teacher Aides**

A nongraded school with team teaching and sound use of teacher aides can be the answer to a teacher’s professional prayer. No longer is she weighted down with trivial clerical details and minor instructional chores. She can now concentrate, in combined effort with her team associates, on the complex, professional task of meeting the individual needs of the children.

**Related Aspects**

Related to the preceding concepts are several other factors important to an open-end education. All of these, of course, are directed toward the individualization of instruction in a continuous process program.

There should be an instructional materials center for teachers in which they may plan cooperatively or individually, direct the preparation of teaching materials, and set up necessary conferences with parents and students. The working area for instructional and clerical aides should be
immediately adjacent in order to facilitate ready access and communication between teachers and aides.

A learning resources center for students should include a good library plus appropriate space and materials for listening and viewing. Magnetic tapes, microfilms, and teaching machines are among the more recent technological aids to individualization of instruction. The use of available programmed materials offers great advantages.

In addition to provision for an instructional materials center for teachers, and a learning resources center for students, the overall building design should provide for great flexibility. As the educational program changes from time to time, the building should be able to accommodate new arrangements with a minimum of expense and effort.

4. CURRICULUM PATTERNS

We can no longer expect our children to learn all or most of the facts. In view of the explosive expansion of knowledge, such a task is not only impossible but undesirable. As knowledge accumulates, the facts change; and as facts change, the students must be prepared to seek out new answers.

Of course, we must continue to instill the basic symbolic skills of the language arts and mathematics. Such skills are the foundation of communication and understanding in almost every important aspect of our society.

Beyond these basic skills, however, we must now begin to concentrate our instruction upon the primary concepts and methods of inquiry peculiar to each major field of knowledge. With this research-oriented approach, developed through key units of study, the student will learn a dependable process by which he can search out the meaning and answers to new problems and changing situations. It would be disastrous to an individual's intellectual progress to be caught with only a "bag full of old facts" and no practiced skill in appropriate methods of inquiry.

5. CLASS, TEACHER ARRANGEMENTS

The arrangement of classes and teachers is one of the primary organizational factors to consider in individualization of instruction. Will the self-contained classroom do this best, or would some type of team teaching be more advantageous? Figures 1, 2, 3, and 4 illustrate some of the possibilities.
In the self-contained classroom, Figure 1, each teacher would have a specific class group throughout the day and teach all subjects except, perhaps, for special activities.

Separate-subject-area teams, teaming vertically through several years as in Figure 2, would allow extensive cooperation in planning and great flexibility in scheduling. The teachers on each team would specialize in one particular subject area.

**Figure 1**
Self-Contained Classroom

<table>
<thead>
<tr>
<th>Levels by Year</th>
<th>Language Arts</th>
<th>Mathematics</th>
<th>Social Studies</th>
<th>Science</th>
<th>Special Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>One Teacher</td>
<td>All Subjects</td>
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**Figure 2**
Separate Subject Area Teams

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<th>Levels by Year</th>
<th>Language Arts</th>
<th>Mathematics</th>
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<td>Team #1</td>
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Separate-subject-area teams, teaming vertically through several years as in Figure 2, would allow extensive cooperation in planning and great flexibility in scheduling. The teachers on each team would specialize in one particular subject area.
In Figure 3 the teachers would specialize in closely related subject areas over a three year vertical span.

In Figure 4 all members of a team would be involved in teaching all subjects over a two year vertical period.
6. A COMPREHENSIVE PROPOSAL

In our studies of the learning process, we have learned that children learn best by wholes. The different subject areas should, whenever possible, be integrated for greater understanding. Also, we make the best use of teacher talents by an open-end process of education which allows for individualization and continuous progress. With these requirements in mind, Figure 5 suggests a comprehensive proposal for elementary school organization. An extension is made into junior and senior high school in order to present a more complete picture. Levels are indicated by year as a matter of convenient illustration and ready understanding, but the program would be nongraded throughout.

**Figure 5**

A Comprehensive Proposal

<table>
<thead>
<tr>
<th>Levels by Year</th>
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<th>Mathematics</th>
<th>Science</th>
<th>Special Activities</th>
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<td>One Teacher</td>
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<td>One Teacher</td>
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<td>One Teacher</td>
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All Subject Areas Team

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Separate Subject Area Teams

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Kindergarten, first, and second levels would be self-contained so that the children would be with one teacher all day.

The third and fourth levels would be taught by a two-year team with each teacher involved in all subject areas. Flexible grouping would provide for individual needs.

The fifth and sixth, and the seventh and eighth levels would be made up of two-year teams with teacher specialization in related subject areas.

The ninth and tenth, and the eleventh and twelfth levels would require two-year teams with teacher specialization in separate subject areas.

This arrangement would provide for a gradual movement into teacher specialization as the curriculum content became more complicated. In this fashion we could kill two birds with one stone. Teacher talents would be more fully utilized, and children properly grouped would progress according to their individual capabilities under more able instruction.

Teams thus specialized from the seventh grade on would need to plan their units of presentation so as to include logical relationships and interaction with other areas of knowledge. The team leaders of the different blocks should cooperate and plan extensively to bring such integration about. Because of the importance of this problem, some schools may rightly prefer to establish interdisciplinary teams to avoid the ills of too much specialization.
7. SUMMARY

It is hoped that the ideas presented in this brief discussion will stimulate conversation relative to alternative, and perhaps better ways of organizing instruction. The particular arrangements within any one school will, of course, depend upon the local situation, including staff competencies, building design, and community needs.

Changes of major extent will normally require at least two years of preparation before actual implementation. The first year should be devoted primarily to teacher and administrative investigation and study. The second year would need to be used to fully orient the parents and children, and to actually program the change.

As we look to the future as professional educators, we must envision a type of open-end education that will enable each child to realize his own potential and make his greatest contribution to society.
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