The primary objective of this study was to encourage teacher education programs to further the knowledge of the principles, modes of teaching, learning styles, and organization of open education. Procedures used in conducting the study were (1) an analysis of the literature reflecting a theoretical framework within which the components of open education might be identified, (2) an analysis of the literature pertaining to the characteristics of the open classroom at the primary level and the open concept, and (3) a search of current empirical data suggesting the effectiveness of the open education movement for altering elementary school practices. Rationale were presented for open space, nongrading, and multiage grouping. Results from the study suggest that teacher education should make greater use of nontraditional approaches, more instructors should implement nontraditional approaches in their own teaching processes to serve as models for teacher trainees, teacher education programs should make a concerted effort to ensure that teacher candidates comprehend the underlying principles of personalized learning and programs, and initiative should be taken by teacher education programs to establish cooperative programs with schools in developing open environments within their systems through onsite support to the educational community as it develops an individualized approach to learning. (IRT)
AN EDUCATIONAL POLICY ISSUE
THE OPEN EDUCATION MOVEMENT AND TEACHER TRAINING

THE EDUCATIONAL POLICY SYSTEMS

U.S. DEPARTMENT OF HEALTH,
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UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

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AN EDUCATIONAL POLICY ISSUE
THE OPEN EDUCATION MOVEMENT AND TEACHING TRAINING

GLORIA S. GIBBS
UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

INTRODUCTION

One of the major issues in higher education under frequent discussion is the question of Open Education and its effects on educational standards. Little attention has been paid to the broad issue of "Open" Education and its implications for the elementary undergraduate teacher training program in an urban university. Consequently, the purpose of this study was to examine the underlying principles of the Open Education Movement at the local, national and international level in order to assess its relevance to teacher preparation in American elementary schools.

Harold G. Shane (1973, pp. 380-405) has stressed that the personalized concept for elementary curricula should be one of the basic changes in the elementary schools in the dozen years between 1973 and 1985. He stated that, "the scope, sequence and pacing of what is learned are uniquely personal, governed by pupil motivation and professional judgment rather than
by conventional curricular precepts or group norms. Progress resides in the learner's improving dynamic relationship with a learning environment that takes account of a changing culture. Success is not determined by the child's ability to adjust to the demands of a static culture that adults have decided school should transmit and preserve."

Shane's concept of personalized curriculum has distinct implications for organizational structures—a continuum of schooling beginning in the lower reaches of public education and extending into later maturity, literally to the seventy or even eighty year age group.

Generally, the Open Education Movement viewed in this context should therefore be concerned with the process of education in its total aspects: the growth of children, the growth of college instructors, teachers, administrators, and the continuing growth of the university as well as the school as an institution.
BACKGROUND AND SIGNIFICANCE

The reasons for an examination of the Open Education Movement in relation to teacher training education programs were as follows:

1. The term "Open Education" as applied to all levels of instruction -- primary through college -- has tended to become another educational cliche.

2. Similarly, as in higher education, many educators and practitioners at the primary level argue that "Open" Education leads to the lowering of standards and a failure to teach adequately the 3 R's. Some proponents of this view also question the feasibility of placing every child or teacher in an open environment.

3. On the other hand, positive supporters of Open Education argue that all pupils can learn in an open environment or classroom. The positive supporters also contend that Open Education is the best approach for all social classes and levels of achievement.

Hence this study was devoted to a review of educational literature focusing on the Open Education Movement during the late 60's and 70's. An examination of the literature reflecting the pros and cons of Open Education was undertaken in order to make a distinction between romantic and realistic education views to note its relevance to teacher training.

Currently, despite the pros and cons centering around Open Education, or more specifically, the open classroom concept, requests from school districts for preservice students continue to underscore the need for more systematic training of prospective teachers for open and semi-open classrooms.
Moreover, it is equally important that preservice trainers of prospective teachers comprehend that in any educational movement, which is considered innovative, there is a strong tendency to plunge "head on" without close examination of its components and without a careful examination of the various positive and negative issues of the movement. Such a trend can be witnessed in the current Open Education Movement. These issues, naturally, have cultural, historical and sociological implications for both the teacher training institution and the practitioner.

In following the Open Education Movement from 1970, a positive and sane position taken by many American educators has been to examine critically what is wrong with American elementary schools and attempt to find an alternate approach. The current trend emphasized improvement by emulating the more child-centered, humane, informal approach exemplified by the British primary school; hence, the British infant school served as a successful model for challenging the deeply ingrained, traditional rigid structure which still had a strong hold on many American elementary schools regardless of the ethnic or socio-economic community in which they were located. From the late 60's to the present, the open classroom served as a model for changing the traditional lockstep curriculum which had prevailed for far too long in American elementary education. Thus, as an alternative to traditional education, the open classroom provides a wider range of alternatives in a total educational environment than provided by traditional schools.
In a speech delivered at the 30th annual superintendents work conference at Teachers College, Columbia University, Dr. Harvey B. Scribner (1971), Chancellor of New York City schools, pointed out that the major shortcoming of the traditional classroom is that there are few alternatives open to the pupils and parents. We may also add to this charge that the traditional classroom also offers few alternatives to the classroom teacher. Aside from the restrictions and limitations that the traditional education tends to place on the pupils' social, emotional and intellectual growth, teachers, too, are forced to conform in ways which ignore their interests, personalities and capabilities. Ideally, Open Education recognizes differences among pupils and teachers. These factors should be considered carefully in planning teacher training curriculum.

In addition, although the traditional teacher-dominated classroom may be acceptable to many parents, pupils and teachers, in the midst-of the challenge to create more open school environments, it is wise for teacher training programs to focus on ways to examine teaching styles, learning styles and school organizations.

In sum: the primary objective of this study was to encourage a more concerted effort in teacher education programs in assisting prospective teachers in acquiring more than a general knowledge of the open classroom underlying principles, modes of teaching, learning styles and open organization.
PROCEDURES

The procedures followed in implementing this study were as follows:

1. An analysis of literature reflecting a theoretical framework within which the components of Open Education might be identified.

2. An analysis of literature pertaining to: (1) the characteristics of the open classroom at the primary level and (2) a description of the "open" concept.

3. A search of current empirical data suggesting the effectiveness of the Open Education Movement for altering elementary school practice.
RESULTS

As pointed out earlier in this study there has been a tendency to equate Open Education with unrestrained freedom and a failure to teach adequately the 3 R's. The reasons for this assumption stem, in part, from the reactions shifting to a new movement in education. The history of mankind reflect a tendency to go overboard during an impetus to initiate change. Educational trends are no exception. A literary analogy to this point was the shift from neo-classicism of the eighteenth century to the romantic period of the nineteenth century. The goal of English romantic writers (Shelley, Wordsworth, Coleridge) exemplified variations of free forms, "spirit" and personal themes as opposed to the subordination of content and personality to form exemplified by the neo-classicists (Dryden, Pope).

Similarly, Open Education was ushered in by proponents of less structure and more concern with freedom. Thus the proponents of freer, more child-centered approaches, or the romantics (Kozol, 1966; Kohl, 1967; Holt, 1967) served to implement the "free" school movement. On the other hand, less emotional and impressionistic views were also expressed by writer such as Joseph Featherstone (1971), Charles Silberman (1971) and Vincent Rogers (1970) in favor of emulating the British successes with their primary education. On a
whole most of these teacher-turned writers were deeply involved in influencing a movement to bring a freer, more child-centered and experienced-based education to American elementary classrooms.

In view of the foregoing statements on the initiation of the Open Education Movement it is necessary for the purpose of analysis and a discussion of the pros and cons inherent in the movement to be viewed (as illustrated in the diagram below) from the perspective of the open or informal classroom as the "middle ground" between the extremism of the "free" school movement and the extremism of traditionalism.

<table>
<thead>
<tr>
<th>FREE</th>
<th>INFORMAL</th>
<th>TRADITIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR</td>
<td>OPEN</td>
<td>CLASSROOM</td>
</tr>
</tbody>
</table>

It appeared that the original, purest, and long-lived example of the free school is Summerhill, a boarding school conceived in England in 1921, and operated by the namesake. Although the term "free" meant many things to many people, at the extreme a "free" school rested on the premise (Fromm, 1972) that human beings are basically good, that the aim of life is happiness and the development of the heart should take precedence over the development of the brain. Although this admirable idealism should be a part of education Kozol (1972), a vigorous proponent of the alternate or free school movement stated candidly that, "free schools
fail because they don't teach"—an example of constructive, reflective second thoughts following excessive initial enthusiasm.

In order to clarify the open classroom concept an analysis of some of the salient characteristics of the open classroom will follow. Parts of this analysis is modified from a study done by the researcher (Gibbs, 1972) following visitation and study of the British Primary School.

First, consideration will be given to the physical characteristics of the informal classroom when placed in juxtaposition to the traditional classroom. Both English and American informal schools tend to exhibit these four distinguishing features, whether a single informal classroom or a school built on an open space design.

1. **Space:** The room or school unit is decentralized by providing flexible space divided into functional areas rather than a fixed homogeneous unit.

2. **Freedom:** Pupils are permitted to explore the room or unit and, with proper teacher guidance, to choose their activities individually or in groups.

3. **Materials:** A very rich learning environment is designed and provided by the teacher from a variety of learning resources—concrete, books and other media.

4. **Individualization:** The presentation of learning to the whole group is minimized and replaced by the teacher and aides working most of the time with individual children or small groups of children.

In addition to these four physical characteristics the open classroom or open plan school lends itself more readily to incorporating more of the innovative approaches of the present and past decade. Listed as follows are
modes of instruction and organizational strategies utilized in the open classroom:

1. Individualized Instruction
2. The Nongraded Curriculum (Purdom, 1970)
3. Learning Through Inquiry
4. Team and Cooperative Teaching
5. Interdisciplinary Learning and the Integrated Day (Brown and Precious, 1969)
6. Multiage or Family Grouping (Ridgway and Lawton, 1969)

Moreover, the open classroom or open plan school accommodates more readily to these four learning modes:

1. Independent Study
2. One-to-One Study (Tutorial Instruction)
3. Small Group
4. Large Group

It is important to note, however, that a school moving to openness and incorporating these strategies listed above depends largely upon its faculty commitment to educational change and the school's facilities.

Currently there can be observed in practice two other outstanding features of the open school which deserves special consideration. The next section of this practicum will explore a rationale for two innovative features of an open classroom and open plan school: (1) open design and (2) nongrading and multiage or family grouping.
I. A RATIONALE FOR OPEN SPACE

Generally, an open plan school is designed to accommodate from 60 to 190 pupils. The open space complex is referred to as a "pod" or "unit" and readily supports the concept of openess. The open complex usually consists of a group of large, open, carpeted areas with no walls or partitions separating the areas as found in a traditional self-contained classroom. Thus, an open complex built to accommodate 150 pupils and 4 teachers is comparable in space to 5 to 6 self-contained "boxes" in a traditionally designed school. (Gibbs, 1972)

Removal of walls tends to remove psychological barriers to a teacher's reluctance to work in harmony with other teachers, as well as provide alternate environments for the child and various aspects of growth. In an open space classroom the teacher is expected to give encouragement to pupil variability. Pupils are always at various levels of sophistication in achievement and subject areas. The open space, then, permits the flexibility needed for the four learning modes--independent study, one-to-one, small and large group.

Although the elimination of walls does not, educationally and psychologically, insure an open classroom situation, the range of alternatives in teaching styles and learning modes in a traditional self-contained classroom is usually limited for both pupil and teacher. Open space not only lends itself more readily to a more flexible physical arrangement of furniture, but it also lends itself more readily to a flexible teaching program which meets the needs of individual pupils. (Gibbs, 1972)
In summary, the open classroom teacher's primary concern is individualizing instruction, finding pupils' learning styles, and providing opportunities for each pupil to become more self-directed and self-motivated. Finally the open space complex provides more impetus for synthesizing several innovative techniques through cooperative and team teaching.

II. A RATIONALE FOR NONGRADING AND MULTIAGE GROUPING

Nongrading and multiage grouping combined in an educational program are more feasible for personalizing learning and coping with variability in emotional, social, physical and intellectual development found in children. The graded school assumes that all pupils are working at the same level of achievement; the emphasis falls on completing a specific amount of materials in a prescribed length of time. Nongraded programs, on the other hand, emphasize mastery without regard to time because other factors must be considered.

Moreover, graded schools imply graded content and graded materials. In a nongraded and family grouped program, consolidation and a wide use of materials eliminate waste and duplication. Teachers can use a wider variety of materials basal textbooks. This extension of materials can permit a broader and more balanced use of concrete materials, trade books, records filmstrips, field trips and discussions in addition to textbooks in teaching essential skills and concepts. (Gibbs, 1972)
What's magical about placing all children of the same chronological age together? Traditional age grouping has many disadvantages. In a graded school, the five year old will have at least four different teachers by age seven. The child in this setting is required to make unnecessary and quite often difficult adjustments through too frequent change of peer groups and teachers. The British model of family or vertical grouping eliminates much of the traumacy associated with these changes. For example, the five, six, and seven year olds or the eight, nine, and ten year olds through family or vertical grouping remain with the same peer group and teachers for a longer period of time. In a family of five, six, and seven year olds the academically able child of six is not hampered by the slower academic progress of the seven year old. Socially, the older and more mature child (regardless of C. A.) can give guidance and support to the younger and less mature pupils, relieving the teacher of much of this responsibility. British informal classroom teachers feel that the younger children profit from association with the older child in an individualized program. (Gibbs, 1972)

Finally, various family groups in a nongraded program can be formed on the basis of interest, cognitive styles, motivation and instruction at varying levels of proficiency. Other broader uses that family grouping can serve are (1) to help pupils to develop autonomy and independence in learning and (2) to give pupils first-hand experience in learning to tolerate peers from different ethnic backgrounds.

The foregoing rationales for open space, nongrading and multiage grouping can be viewed from a clearer perspective in relation to the various adaptation or variation if we note the British Primary School organization.
The English primary school is divided into two sections—infant and junior. The term "elementary" is not used.

<table>
<thead>
<tr>
<th>Infant</th>
<th>Junior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages 4 1/2 - 7+</td>
<td>7+ - 11+</td>
</tr>
</tbody>
</table>

In a typical British infant school class, a group of forty pupils, two teachers and perhaps two aides would function in a nongraded individualized program. Pupils of ages five, six, and seven (vertical or family grouped) would be fairly evenly distributed. The closest parallel to the British infant school in America is kindergarten through second grade or ages five, six, and seven (American traditional organization). The British find vertical or family grouping highly effective with ages 4 1/2 to twelve.

See the appendix for comparative charts of a traditionally organized elementary school and the innovative IGE organization from which various adaptations have been implemented in American educational practice. (I/D/E/A Reporter, 1971).

One of the two representative models for modification in American traditional elementary organization, administration, staffing patterns and instruction is individually guided education and the multi-unit elementary school (IGE/MUS-E), designed by Wisconsin Research and Development Cognitive Learning. IGE is based on the principle that changing a single component, such as teaching methods, instructional materials or school design, does not necessarily yield educational improvement. Integrated in the IGE concept are all the components...
in a composite whole—learning modes, teaching styles, shared decision-making, and home-school communication. All these factors operate simultaneously to help teachers design individualized programs for children.

In sum: Under the IGE system children learn how to learn, one at a time and together, through the use of a unique four-step cycle.

1. **assessment**, to determine what the student has learned.
2. **selection of objectives**, to determine what he needs to learn.
3. **a learning program** selected by the teaching team to help him meet his new objectives.
4. **reassessment**, to determine if the student has achieved his new objectives.

Following the continuous development plan, the cycle is repeated again and again for each child.

The second representative model for modification in American elementary practice is the idea of the open door project, open corridor or cluster classroom organization. (Weber, 1971) This idea was pioneered in New York City inner city public schools by Professor Lillian Weber of New York City College, a long-time exponent of English informal methods and adapting them to large urban schools. The open corridor concept illustrates what traditionally designed and organized schools in urban settings can do to have better educational programs. This is particularly true in areas where the initiation of an informal classroom may be hampered by necessary resources, such as people, money and space. The imaginative use of an old traditional building can compensate for these handicaps. The following diagram illustrated the open corridor organization:
In order for pupils to achieve more continuity of experiences from ages five, six, and seven, teachers who work in harmony can be placed along the same corridor or hallway. This informal classroom arrangement achieves the main goal of extending informal methods beyond kindergarten. Consequently, more continuity of learning experiences can be provided in the curriculum in this open class arrangement for kindergarten through the second year. (Gibbs, 1972)

The use of the hallways or corridor goes beyond its traditional use of hanging pictures or displays of children's work. The hallways are equipped with work areas in science projects, music and fine arts, etc.

The preceding section of this practicum results dealt with an analysis of the informal class salient features as practiced in both England and America and also a discussion of modification of informal class practice in America. The next section of this practicum will be devoted to a discussion of the current, yet limited, data on the effectiveness of informal education. Data reveal both positive and negative manifestations of the Open Education Movement.
Data collected on the Change Program for Individually Guided Education (IGE) for preservice, as well as school practice, suggest a tremendous impact on traditional education; locally, nationally and internationally. IGE, introduced in 125 schools in 1970 had by 1972 (I/D/E/A Reporter, 1973) approximately 700 schools enrolling 350,000 students in thirty-one states. The IGE concept of personalized learning has been adopted by U.S. sponsored schools in twenty-four other countries. Pilot testing of IGE in the middle school and junior high school levels began in September, 1973; whereas, plans were begun to pilot test IGE in high schools.

Positive attitudes on the reception of IGE were indicated from research done by Belden Associates, a marketing research firm, contracted by I/D/E/A to conduct a national survey of parents, teachers, administrators, and students. The sample data on the opposite page is extracted from the Belden Study and indicate positive attitudes toward individualizing learning through a nongraded program such as IGE. (See Table I, page 18)

In the Chicago area mixed feelings are emanating from the bandwagon effect of open classrooms. Parents in Hubbard Woods, an exclusive suburb of Chicago, demanded that their school district release third grade test scores to compare with schools which have traditional programs. This action stemmed from the concern of some parents that their children were not taught word attack (specialized reading) skills.

On the other hand, a study done by researchers in the psychology clinic at University of Illinois, Chicago Circle Campus (Steven Reiss; 1974) clearly
### TABLE I

**ATTITUDES TOWARD IGE**

<table>
<thead>
<tr>
<th></th>
<th>&quot;excellent or good&quot;</th>
<th>&quot;poor&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principals</strong></td>
<td>96</td>
<td>0</td>
</tr>
<tr>
<td><strong>Teachers</strong></td>
<td>95</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>&quot;permits better job of teaching&quot;</th>
<th>&quot;kept from doing a good job&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teachers</strong></td>
<td>75</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>&quot;teaching methods better&quot;</th>
<th>&quot;worse&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parents</strong></td>
<td>61</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>&quot;learned more&quot;</th>
<th>&quot;learned less&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong></td>
<td>63</td>
<td>4</td>
</tr>
</tbody>
</table>

**SUBJECTS**

<table>
<thead>
<tr>
<th></th>
<th>&quot;more interesting&quot;</th>
<th>&quot;less interesting&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students</strong></td>
<td>58</td>
<td>5</td>
</tr>
</tbody>
</table>

*Data extracted from the Belden Study*
suggest a modification of the open concept. These researchers studied open schools in Oak Park (another Chicago suburb) in School District #97 and came up with these conclusions:

1. Creative children had higher self-esteem in open space classes than did pupils in self-contained classrooms, but children who were neither creative nor of above average intelligence had lower self-esteem in open space.

2. In the area of achievement, about one of every five children in open classrooms dropped fifteen points on a national standardized test.

3. Open-space children were found to persist on an extremely difficult task about thirty-five percent longer than children in traditional classes.

4. Most open space children have a more altruistic concept of friendship, although about ten percent more children in open classroom had difficulty making friends.

Additional conclusions drawn from this study by the co-director of the research projects were as follows: (1) Open-Space education was intended to benefit children emotionally and socially without sacrificing academic goals; (2) It appears that only some children adjust well to open-space classes, while others do not and are better off in the traditional self-contained classroom; (3) There is strong evidence that the most creative student would be better in an open-space setting but the researcher (Steven Reiss, 1974) is still uncertain about the less persistent child and the slow learner; (4) Both traditional and open classes should be available for pupils and the Reiss study now is concentrating on determining factors which qualify children to one type of setting over another.
RECOMMENDATIONS

This study clearly suggests that there is a need to personalize learning through individualized programs, and more of these findings should be incorporated in teacher training programs. Starting in the fall, 1974, Chicago Public Schools insisted that a nongraded program be initiated in all elementary schools. This nongraded, individualized program is known as Continuous Progress. Intensive inservice training is now underway. (Board of Education, Chicago 1971)

The guiding philosophy Continuous Progress is based upon the concepts that:

1. Learning is a continuous process.
2. Each person progresses at his own rate.
3. Each person masters skills and concepts according to his individual abilities.
4. Each person has a certain readiness for steps of learning according to his level of maturity and experience at any given point in his life.

These recommendations to teacher education faculty are in order:

1. The teacher education program should make more of the non-traditional, e.g., IGE Continuous Progress become an integral part of the undergraduate program. This should be done in conjunction with local schools.
2. More instructors should implement non-traditional approaches (newer instructional designs) in their own teaching processes to serve as a model for teacher trainees.

3. There should be a concerted effort to insure that teacher candidates comprehend the underlying principles of personalized learning and programs.

4. More initiation should be taken by teacher education programs in establishing cooperative programs with schools in developing open environment or options within its system through on-site support to teachers, administrators and parents as they work toward an individualized approach to learning which is consistent with the manner in which pupils learn.

Finally, as universities become involved in the development of field or training centers in response to the school districts concerned with innovative curricula, this study and recommendations should provide a background piece for examining the underlying principles of the Open Education Movement.
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APPENDIX

Figure 1

Organization of a Hypothetical Graded Elementary School
with 20 Teachers and 600 Pupils

<table>
<thead>
<tr>
<th>Kindergarten</th>
<th>First</th>
<th>Second</th>
<th>Third</th>
<th>Fourth</th>
<th>Fifth</th>
<th>Sixth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
</tr>
<tr>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
</tr>
<tr>
<td>of age 5</td>
<td>of age 6</td>
<td>of age 7</td>
<td>of age 8</td>
<td>of age 9</td>
<td>of age 10</td>
<td>of age 11</td>
</tr>
<tr>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
</tr>
<tr>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
</tr>
<tr>
<td>of age 6</td>
<td>of age 7</td>
<td>of age 8</td>
<td>of age 9</td>
<td>of age 10</td>
<td>of age 11</td>
<td>of age 11</td>
</tr>
<tr>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
<td>1 teacher</td>
</tr>
<tr>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
<td>30 pupils</td>
</tr>
<tr>
<td>of age 5</td>
<td>of age 6</td>
<td>of age 7</td>
<td>of age 8</td>
<td>of age 9</td>
<td>of age 10</td>
<td>of age 11</td>
</tr>
</tbody>
</table>

Figure 2

Illustration of a Hypothetical Elementary School Organized into Units

<table>
<thead>
<tr>
<th>UNIT A</th>
<th>UNIT B</th>
<th>UNIT C</th>
<th>UNIT D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Unit Leader</td>
<td>1 Unit Leader</td>
<td>1 Unit Leader</td>
<td>1 Unit Leader</td>
</tr>
<tr>
<td>4 Teachers</td>
<td>4 Teachers</td>
<td>4 Teachers</td>
<td>4 Teachers</td>
</tr>
<tr>
<td>1 Instructional Aide</td>
<td>1 Instructional Aide</td>
<td>1 Instructional Aide</td>
<td>1 Instructional Aide</td>
</tr>
<tr>
<td>1 Clerical Aide</td>
<td>1 Clerical Aide</td>
<td>1 Clerical Aide</td>
<td>1 Clerical Aide</td>
</tr>
<tr>
<td>150 Pupils Age 5,6,7</td>
<td>150 Pupils Age 7,8,9</td>
<td>150 Pupils Age 8,9,10</td>
<td>150 Pupils Age 9,10,11</td>
</tr>
</tbody>
</table>