“Best practices” in a few schools today may be widespread tomorrow.

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Elementary Education: 1985

WHAT will the elementary school be like 25 years from today? Perhaps it will help us to look back at the elementary school of 25 years ago—1935. The testing movement of the 20’s had a firm impact. Individual differences were being given considerable attention. Unit teaching was utilized in the better elementary schools. Considerable effort was being expended to provide a more flexible day for the elementary school pupil. Significant implications from research in child development were being given consideration in curriculum planning. In some areas educational radio was making its contribution to the schools.

Today, after 25 years, many of these trends have grown into maturity, with educational television replacing radio. Perhaps the greatest advances have been in media and materials which are available in the elementary school. Texts have been greatly improved, supplementary books and educational films have increased markedly both in number and quality. Tapes and recordings have served many uses. In addition, improvement of school buildings, some increase in the training of teachers, and elimination of many small districts have had an influence on the elementary school program.

Suppose we could look 25 years into the future. We are in a period of rapidly accelerating change. It seems safe to predict that the changes during the next 25 years will be more rapid and of greater significance than the changes of the past 25. We are clearly moving into a period of greater concern. Public interest in education is high, more money is available for research, the challenges of the future are pressing. The atmosphere thus developed for change will undoubtedly accelerate change.

Buildings

The elementary school building for tomorrow will be a one-story structure accommodating between 500 and 1000. There will be many specialized facilities which are not available in the ordinary schools of today. Special rooms will include a health and psychological center,
a library, a cafeteria, a gymnasium which may be a multi-purpose room with showers, conference rooms for use of teachers and parents, and outdoor areas. There will be access to a swimming pool. Between two classrooms there will be a work laboratory equipped for construction, science experiments, and even perhaps with individual booths for use of tape equipment, and automatic teaching machines. Each classroom will be equipped with a television set, tape recorder, record player, and typewriters. Each desk will have its own pencil sharpener. In many areas of the United States the school will be air conditioned as well as heated.

Staff

There will be a full-time supervising principal, a school secretary, and secretaries for every four to six elementary teachers.

Each classroom teacher will have a master's degree. He will also have an area of specialization, such as social studies, arithmetic, science, measurement, child development, and the other areas needed in the elementary school. Each teacher then, in turn, will serve as a resource person when his area of specialization is of concern to the faculty. The kindergarten teacher will teach half a day. She will have special training in individual testing, and in interviewing parents. She will use the afternoon for individual testing, home visitations, and for conducting child-study programs with the parents of the school.

The greatest change in consultant services available will be in the psychological area. There will be a child psychologist for every 2000 pupils. The case load will then be such that the psychologist may work effectively with individual pupils, teachers, and parents. The recognition that the ages five through twelve are of utmost importance in emotional development, second only to the age range birth to five, will thus be implemented by providing the necessary expert help at this age. Other consultants will include the commonly available ones of nurse, speech correctionist, art and music consultants, and elementary supervisor. Special education facilities will continue to be provided, with more attention being given to children with emotional problems. Adequate medical and dental services will be made available where these cannot be provided for by the home.

Each school will have a full-time librarian with a clerical assistant who is in charge of all types of instructional materials. A physical education teacher will be available. He will be able to diagnose the physical and muscular development of children to a much greater extent than is possible today. He will also provide a more intensive, individualized program of muscular development in relation to each child's particular needs.

The probability is that new patterns of utilizing staff will be developed. At times the teacher may be working with much larger groups than at present, at other times with small groups or with individuals. Proposals for effective use of staff time should be carefully evaluated in terms of the effects of the new program on children. There has been too strong a tendency in many schools in the past to jump on attractive bandwagons. With the research techniques available today, the seductive glitter of the new should be carefully evaluated.

While a library with a full-time librarian is the heart of some elementary schools today, it will be taken for granted
in the schools of tomorrow. It will include books classified by reading level, pamphlets, picture files, record and transcription collections, science and arithmetic equipment, slides, filmstrips, tape collections including TV tape, films, museum-type materials, conference room, listening booths, transparency collections, professional materials for teachers, and files of community resources, including human resources. There will be adequate clerical help for the librarian.

Connected with the library will be a large individualized instruction room. The room will contain listening booths for the use of master or individualized tapes, and a whole series of teaching machines. Children will be assigned to the room for group or individual help. The tapes will provide assistance in teaching foreign language, music, phonics, in speech correction, and undoubtedly in other ways including perhaps giving a committee the opportunity to hear an outstanding leader from a country they are studying. Then there will be a large number of specific lessons, programmed for the teaching machine.

Often, when the teacher has diagnosed the specific difficulty of a child, certain lessons will be prescribed for helping the child with his difficulties. Also, in this room there will be larger booths containing a modified television set. Electronic tape, which promises to be one of the most versatile audio-visual resources of the future, can be placed in the television set for individual or committee viewing. The same tapes can be used for home study with all television sets equipped to handle tapes. The person in charge of such a room would not have to be a certified teacher, but he would be one who could locate materials and operate the machines.

Organisation

There will be considerable experimentation with various patterns of organization. The great need is to have such experimentation carefully evaluated. In the primary grades a teacher undoubtedly will continue with his class for a two-year period. This will mean that children will have the opportunity to mature during a span of the present first and second grade without the usual pressures on the first grade teacher. The same plan may be followed during the third and fourth grades. The intermediate grades seem to offer more opportunity for a variety of plans of organization than do the primary grades. Basic to any plan will be a consideration of the best available experiences for boys and girls in all areas, rather than in one limited area, such as reading. Our lock-step graded system may have disappeared as have half grades in the past 25 years. With additional clerical help available to teachers, there will be opportunities to develop better instructional materials, better evaluative materials, more detailed cumulative records and to conduct better parent-teacher conferences.

Curriculum

In general, the elementary curriculum will have greater flexibility and at the same time, in certain areas, more uniformity. The uniformity will come from television which will bring to the classroom many learnings the teacher would find difficult, if not impossible, to supply. Television will also release the teacher for more individualized instruction. Social studies is one area in which television undoubtedly will be most effective. There will be a great deal more
research identifying concepts, understandings, and misconceptions which students have in a given area. The broad areas for each level will be carefully selected. The important concepts which children can understand and which can be made meaningful will be utilized in planning. Such planning will, of necessity, involve the school personnel in the area served by the television program. The unique contribution which television can make will be made in programs telecast two or three times a week. Comprehensive study guides will be prepared on an area basis which will include references, suggested experiences, and visual and auditory materials. The teacher will have time available then to work with individuals and groups. There are implications in this situation for the establishment of a new type of state-supported curriculum planning staff on a level between present state departments of education and local school systems.

Reading programs will include much more individualized reading. In the first grade this individualization will be accomplished through students’ drawing pictures, and telling the teacher or clerk about the picture. This will be recorded on a dictaphone or tape and transcribed by the clerk, for the child’s own reading. Throughout the primary grades much greater use will be made of the child’s own stories as a basis for reading, for typing them will be relatively easy. Obviously, such a program needs to be handled by a teacher who is thoroughly familiar with the developmental skills in reading and can supplement these with group or individual instruction. In some cases, this instruction may be handled partially by the teaching machine.

More attention will be given to physical and motor development, for the physical education teacher will be an expert in this area. Specific provision will be made for muscular development for all children with specific help on individual cases. School camping and exchange visits both in and out of the country will become much more common.

Programs will be developed that will provide the non-verbal child with feelings of success. Such programs will be greatly accelerated with the provisions for proper psychological counseling of emotional problems. Breakthroughs in biochemistry may develop techniques of medication which will greatly assist children with learning or emotional problems.

Research

In all areas research will help us with the selection of important concepts, avoid duplication and omission of significant generalizations, and obtain a better understanding of what children already know through pre-testing of concepts. Integration of subject fields will increase, but this integration will be carefully planned rather than incidental. For instance, increased emphasis on concepts of physical and mental health will be developed in social studies by careful analysis and allocation of concepts and experiences. New materials and methods will be available for enriching programs for gifted children which will really challenge their learning abilities.

More attention will be given to the development of critical thinking, problem solving, and creative thinking. One of our current difficulties is that so much of our elementary curriculum consists of materials to be learned by the student. In 1985 we will be approaching learning of important content through techniques
requiring comparison and evaluation, anticipation of probable outcomes, and creative questions such as, "If this development had taken place, what would have happened?" The approach will be to develop more openmindedness and questioning on the part of the student rather than a mastery of certain specific procedures.

Creative experiences for children will become increasingly effective. We will improve our understanding of how to encourage creative expression in art. Opportunities for developing appreciation of music and literature will increase as additional materials are made available in recordings and in television tapes. More media in all the creative areas will be utilized. Such developments will become increasingly important as leisure time increases due to automation.

Many elementary children will learn a second language taught through television, tapes and recordings, texts, and reading materials. Mathematics and science will undergo rather marked changes. Basic ideas and principles will be taught earlier by utilizing techniques of discovery through experimentation. Typing will be a skill universally taught.

**In-Service Programs**

Due to the introduction of new content and teaching procedures, there will be an emphasis in in-service programs on familiarizing teachers with the necessary content. Much of this work will be presented over television to teachers of an entire area. Such programs will then be followed up in local schools, utilizing their own leadership. Every staff member will have the responsibility of helping to keep the staff up-to-date on experimentation in one of the various areas.

More professional materials will be available in each school. Included will be material to strengthen the subject-matter backgrounds of teachers in new or reorganized content.

**Parents**

There will be more child study groups, again utilizing TV and supplemented by the skills of the kindergarten teacher. Parents will be used as resource leaders and to help where possible in various phases of the school program. Not only will parent-teacher conferences be universal, but many will be held over a Phonovision. Consultants will be available to work with parents of children having special problems, including emotional difficulties.

Many of these seemingly visionary ideas are operating in one or more school systems throughout the United States. The rapidity with which they will become common practice depends on the willingness of school systems and teacher education programs to intensify their experimentation and research, upon increased support for public education, and upon the creative use of the products of technology which appear in the offing.

Faced with many implications for change we should never lose sight that proposals need to be evaluated in terms of helping teachers to contribute to the development of the minds and hearts of boys and girls. Our children of tomorrow may quite literally have more worlds to conquer than have the children of 1960.

P.S. Certain problems will undoubtedly prove too complex for solution, even by automation, such as: dogs following boys to school, missing handkerchiefs and the one lost overshoe.

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