

# Editorial

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## Continuing Growth: Today's Imperative

THE times demand a bold new look in the education of America's teachers. Dramatic social and technological changes suggest changing purposes and objectives of school programs at different age levels and in different subject fields.

Rapidly expanding frontiers of knowledge make more relevant than ever before the classic query, "What knowledge is of most worth?" Research and inquiry in nearly every field cause knowledge acquired only a few years ago to become sadly out-of-date. Pervasive societal trends toward specialization suggest the growing importance of the general education functions of elementary and secondary schools. New media of instruction and new conceptions of teaching make the task of the teacher increasingly complex. A population on the move brings many new faces to every school each year and confronts teachers and instructional leaders with the difficult problem of providing continuity and sequential development in the learning experiences of their students. And, unfortunately, expanding ratios of students and teachers to instructional supervisors reduce the possibilities of person-to-person consultation on teaching problems at just the time when other trends seem to point to the growing complexity of the teaching role.

All of these trends make apparent the need for expanded and improved educa-

tional programs for teachers. More important, they emphasize the necessity for teacher preparation to be viewed as a continuing process, beginning in the first year of college and continuing throughout the professional life of the teacher. An examination of some of the developments mentioned here lends support to such a conception of teacher education.

### New Developments

*The "explosion" of knowledge makes new demands upon teachers.* The magnitude of once manageable bodies of knowledge is now such as to require not simply more time for adequate coverage but rather a whole new approach to the analysis of each field in order to discern those elements which are most significant to learn and to teach. In the words of Joseph Schwab:

There is no longer a problem of how to obtain coverage. For coverage is no longer difficult but impossible. There is still need and vital need for a minimum education which consists of useful bits and pieces of the content of the disciplines. But the best possible selection of the most useful of bits and pieces from the content of the disciplines would constitute, today, only one portion of the curriculum which we need. Other and more profound changes in the scientific disciplines now make it urgently desirable that we teach something more than their content, their conclusions, selected or unse-

lected . . . that we also convey a sense of the structure of the disciplines. For . . . without some understanding of these structures, the learning of conclusions, of content, becomes mislearning and misunderstanding.<sup>1</sup>

This conception of the study of the disciplines by teachers makes clear that the task is a continuing one. New knowledge is constantly being added and each addition demands more than merely faster cramming of a larger amount of knowledge. Instead, it demands a more thoughtful review of knowledge in each field to determine its rationale, its central concepts, its unique methods of inquiry. Obviously, at no one point in time can any group of educators permanently answer the fundamental questions regarding the structure of knowledge in a discipline or subject field. Continuing additions to knowledge in every field that are the outgrowth of research, experimentation, and accumulated experience make necessary a continuing process of examination of these fields by scholars and teachers working cooperatively. This conception of the study of the disciplines necessitates more time, not to soak up more knowledge uncritically but in exploring and understanding the relationship between ideas, in grasping the methods of inquiry associated with the field of study and in sensing the foundational nature of certain concepts.

More time is needed to move away from learning vocabulary and classification systems and the manipulation of apparatus and toward the learning of concepts, processes, relationships, and other higher level intellectual tasks. Such time is not available in the present preservice program of teacher education. Although

it is likely that preservice teacher education programs will be extended to five years or more in the near future, it would appear more feasible to link preservice and in-service education in an integrated program designed to utilize a longer span of years for teacher development.

*Changes in knowledge render earlier learnings obsolete.* The tremendous increase in the volume of knowledge complicates the task of educating teachers. The many changes that occur make some earlier conceptions obsolete in a relatively short span of years.

In a field like physics the teacher who has not taken additional course work in that content area for six or eight years is likely to be transmitting many ideas that are distorted or wholly false. The reality of rapid change means that no program of teacher education, however long and however good, can be effective unless it systematically provides for the continuing education of the teacher on the job. There seems to be no practical alternative to this view. Either in-service education is accepted as a fundamental and essential dimension of the preparation of *every* teacher or we must accept the fact that teachers will fast grow out of touch with the emerging ideas and knowledge of the contemporary world.

If in-service or continuing education is essential to the preparation of every teacher, preservice and in-service education should be viewed as parts of a single process. The same kind of systematic planning and curriculum design that applies to present preservice programs should apply to in-service education. The education of every teacher must be viewed as beginning with general education experiences in early college years, continuing through professional pre-service work, and extending throughout

<sup>1</sup> From an address to the Council on Cooperation in Teacher Education, Washington, D. C., October 1961.

a number of years in service. Efforts should be made to develop overall designs for such programs, recognizing that pre- and in-service facets both make essential contributions to the total education of the teacher. To be sure, some division of labor between pre- and in-service education will be necessary. However, first it is important that the two be put together and viewed as essential ingredients in a unified long term educational program. Decisions can then be made as to which are best reserved for the in-service program.

There is reason to believe that foundational aspects of teacher education should be incorporated in the preservice program, but communicated through the medium of carefully selected specific illustrations. The extension of the teacher's competence can then come over a period of years in in-service education in which more attention can be given to developing skill in methods and procedures and familiarity with useful instructional materials. Such a plan is, of course, more readily described than implemented. Colleges and school systems have long been accustomed to operating independently, with only informal and often inadequate means of communication and cooperation. The merging of preservice and in-service education would force them together in a close working partnership and would necessitate new conceptions of budget and staffing and programming. New mechanisms of cooperation would need to be devised, both between colleges and school systems and among school systems, for many smaller systems would not possess the resources needed to support a high caliber program.

Changes in various subject fields will also likely bring about heightened in-

terest in the processes of inquiry associated with that field rather than simply a preoccupation with the answers derived. New emphasis will be needed upon research and experimental approaches, for not only will teacher educators be unsure of the answers to problems of the future but they will not even be able to predict accurately the problems to be encountered. Emphasis upon research and experimental methods will be needed in the education of teachers at all levels. Present research training is usually begun in only very rudimentary fashion at the master's degree level and then too often continued in extremely conventional form at the doctoral level.

It would seem necessary that substantial beginnings in the *doing* of research, not simply its reviewing, be provided in preservice education programs. Helping teachers discover answers to the problems that concern them calls for a program of education in which the teacher continues to participate actively long after his preservice preparation has been concluded. Teachers will need to acquire practical research skills. So will their principals and supervisors if they are to provide this type of help. Skill as consultants to groups of teachers interested in carrying on systematic experimentation aimed at improving the curriculum or their own instruction will become a stock in trade of all instructional leaders. The role of such leaders, rather than one of telling, will be one of helping teachers to find out.

*The societal trend toward specialization suggests the growing importance of the general education function of elementary and secondary schools.* On nearly every hand society seems to be moving toward greater specialization of

function. This movement is generally markedly advantageous in terms of efficiency of production. Such a trend, however, is frequently accompanied by barriers to communication from group to group and sometimes by the breakdown of shared values and concerns that represent the "social cement" with which community life is maintained.

Schools undoubtedly have a role to play in helping young people prepare themselves for effective participation in specialized fields. They have also an even more significant role in helping youth to find common frames of reference and shared values, to establish continuities between different facets of their experience that will help them to live their lives richly and well. As historian Henry Steele Commager observed, the school should not serve as a mirror for society, reflecting only that which is already present, nor as a tranquilizer for society, but rather as a conscience for society. Accepting such a view, the specialization of other dimensions of modern life places new demands upon the school for expanded and more effective general education programs. It is hardly realistic to assume that these broader programs can be provided adequately without improving and expanding the general education programs to which teachers are exposed during their preparation.

More than ever, teachers will need a high quality of general education. Such an education cannot be confined solely to the first two years of a four year program. It must be extended into the junior and senior years of present preservice programs, into graduate programs for teachers, and into in-service education programs carried on after a teacher is certified and employed. If much of the content of the elementary and secondary

school is general education, we believe it would be unwise to separate such content from the professional courses concerned with curriculum and methodology.

Is it sensible to neglect general education at the graduate and in-service education levels as most current programs seem to do? General education, too, is constantly changing. Teachers who are to be effective teachers of general education must have continuing opportunities to enrich their own general education. Perhaps we have tolerated too long graduate programs for teachers which provide only for methods courses. There seems great need to make provision for post-baccalaureate experiences focusing on new ideas in general education. The general education of the freshman and sophomore years, no matter how good, is simply not adequate to last the teacher a lifetime. It must be built upon, extended and enriched as the teacher continues his professional growth.

*New media of instruction and new insights into the nature of teaching combine to make the task of the modern teacher increasingly complex.* The development of educational television, automated teaching, language laboratories, eight-millimeter sound cameras, overhead projectors, to name but a few technological advances of the past decade, have contributed to a new outlook on teaching. They suggest that teaching may perhaps be fruitfully differentiated by a range of learning activities, varying from independent study through class discussion to large group observation of lectures and demonstrations on television. The concept of what the teacher does has become radically changed as a result of these developments.

New insights into the nature of teaching also make more complex the task of the modern teacher. While the new insights seem to suggest certain common elements in teaching at all levels and in all subject fields, they point out, nevertheless, the necessity for understanding the consequences of teaching behavior at a level far beyond that of surface responses. Recent studies such as those conducted by Marie Hughes at the University of Utah point out significant differences in the kinds of questions teachers ask and the kinds of learnings which result. Ned Flanders' work at the University of Michigan provides a framework for analyzing the patterns of interaction between teachers and students. B. Othanel Smith's projects at the University of Illinois emphasize the need for teachers to know more about logic and to be able to discern and help youth understand significant differences between expressions of fact and of value. All point to the need for a deeper understanding of the processes of teaching and learning.

Some time from existing programs can be saved for each study by giving less attention to the techniques of teaching and more to these fundamental considerations of the nature of teaching. But an understanding of teaching in this sense is a never-ending quest, one which continues throughout the career of the teacher. Each new student, each new year, brings fresh insights and concepts which enrich and deepen the mature teacher's understanding of his role and of the role of education in a democratic society.

*The geographic mobility of our population poses many problems for today's teachers.* When one-fifth of the children are new to a school each year, it is clear

that a teacher cannot simply repeat what he has done before. New children come to the classroom from many different communities and with a wide range of interests, values and perceptions. A constantly changing population means that teachers must be alert to new dimensions of the teaching-learning situation, must continue to grow in their own understanding of these children and of the range of social forces that influence them. The mobility of population means, too, that teachers everywhere must search with renewed energies for the common elements in school curricula that will provide the continuity between school experiences in one community and in another. It is no longer sufficient to plan a program that fits a single community and its concerns and problems.

Curricula must now be designed that will take into account the movement of families from one part of the country to another and will serve as bridges from one learning experience to another. The most complex demand that mobility makes upon the schools is that they provide educational experiences that build upon and reinforce a common framework or rationale for education without, at the same time, becoming rigidly standardized. Such planning requires study in greater depth in the subject fields to seek out the structures, unique methods of inquiry, fundamental concepts, etc. Such study is a continuing process associated with true professional development as a teacher.

*Rapidly expanding student populations in elementary and secondary schools have necessitated adding many new teachers.* In most communities, unfortunately, the ratio of supervisory personnel to teacher personnel has de-

(Continued on page 133)

scores on 85 percent of the tests. In 1956, 104 schools offered the program, whereas last year 1,350 did. During the same period the number of colleges that permit students to skip courses grew from 130 to over 600.

Despite this dramatic growth, advanced placement programs are reaching less than 1 percent of the total number of high school students who graduate each year. And less than 5 percent of the nation's public and private high schools are included. Approximately half of the country's four-year colleges participate.

Last year Harvard had the largest percentage of advanced placement students—452 out of 1,150 entering freshmen. Studies at Harvard show the students who skip courses or are granted sophomore standing do as well academically as other students.

The College Board is contemplating extension of the tests to include economics, political science, philosophy, Greek, and other subjects.

—MELVIN W. BARNES, *Superintendent of Schools, Portland, Oregon.*

#### Editorial

(Continued from page 89)

creased so that teachers can expect less rather than more supervisory help on jobs which are growing in complexity. It appears unlikely that this trend will be reversed or even slowed in the years immediately ahead. An increasing number of new teachers will have less face-to-face supervision by principals and supervisors than they have had in the past.

Two or three possibilities seem to have promise in this regard. One is to utilize available supervisory personnel in new ways—more nearly as instructors in in-service classes of teachers than in individual visitation and conferencing. A second is to extend the educational



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training period of new teachers into their first years on the job with teacher preparation institutions taking greater responsibility for continuing supervision and additional training. A third possibility is that of utilizing experienced teachers as helping teachers or in supervisory roles with their less experienced colleagues. None of these ideas is new but it would appear that the demands of the immediate future will call for their utilization on a scale not yet attempted. Each of the possibilities suggests a continuing education role for teachers as learners and as teachers of less experienced colleagues.

*Clearly from many points of view the education of teachers is a continuing task.* New avenues of cooperation are needed between and among college personnel responsible for general education, academic specialization, and professional

preparation. New avenues are needed, too, between colleges and school systems in order to blend preservice and in-service education experiences into a coordinated whole. And new avenues of cooperation are needed between and among teachers, principals and supervisors to more effectively utilize the special competencies of each in the continuing education of teachers. The times demand a bold new look in the education of America's teachers. The time to begin on the task is now.

—GEORGE W. DENEMARK, *Dean, School of Education, University of Wisconsin-Milwaukee.*

#### Fostering Growth

(Continued from page 100)

ess, learning theory, research, creative and critical thinking, and special education constitute some of the programs and problems that teachers, administrators, and supervisors explore together in these summer seminars and workshops. Some of these experiences provide a laboratory setting for using children in enrichment and remedial programs for demonstration teaching, followed by critical analysis and discussion. Wherever possible these offerings are given in cooperation with universities or colleges and provide graduate or renewal credit if needed.

The summer program is broad enough to include a considerable number of teacher scholarships for a wide range of selected staff to attend various and often far-flung graduate schools that offer courses or workshops of immediate or special interest and concern to the Montgomery County public schools. As an integral part of the total summer program, new teachers of foreign language and junior high mathematics are employed at full salary to attend two-week workshops to orient them to content and

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method in their fields as practiced in our county school system.

In carrying out such a staff development program, it should be obvious that the staff of the entire school system is involved collectively and individually at one time or another, not only instructional staff, but secretarial, business affairs, custodial, and maintenance staffs as well. It should be equally obvious that while all leadership personnel must be concerned and must take action to foster continuing growth, essential coordination of certain facets on a system-wide basis ensures more far-reaching results, broader participation, and fewer gaps. Finally, it should be clear that cooperative action must be taken on the part of school system, teacher education institutions, professional organizations, and the career teacher himself if the existing gap between personnel realities and curriculum ideals is to be bridged.

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