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ADAPTING EDUCATIONAL CHANGE TO MANPOWER NEEDS IN QUINCY, MASSACHUSETTS, AND WOOD COUNTY (PARKERSBURG), WEST VIRGINIA.

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PRESENT PROCEDURES AND INNOVATIONS RESULTING FROM TECHNOLOGICAL CHANGES WERE EXAMINED IN TWO REPRESENTATIVE SCHOOL SYSTEMS TO HELP OTHER SCHOOLS, BOARDS, AND FACULTIES FACING COMPARABLE PROBLEMS. THE STUDY FOCUSED ON MANPOWER TRAINING AND DEVELOPMENT, THE RESOURCES AVAILABLE IN THE COMMUNITY, THE PROFESSIONAL STAFF OF THE SCHOOLS, THE RECEPTIVITY TO INNOVATIONS, THE LIMITATIONS IMPOSED BY FINANCIAL STRINGENCIES, THE NEW RESOURCES AVAILABLE FROM FEDERAL SOURCES, AND THE INDUSTRIAL AND BUSINESS ENVIRONMENT. PROCEDURES DESIGNED TO DEAL WITH THE CULTURALLY DEPRIVED, SCHOOL DROPOUTS, AND ADULTS SEEKING RETRAINING OPPORTUNITIES WERE SPECIALLY CONSIDERED. GENERALIZATIONS IDENTIFIED DURING THE 2-YEAR STUDY WHICH SHOULD BE USEFUL AS GUIDELINES INCLUDED -- (1) THE GAP BETWEEN GENERAL AND VOCATIONAL EDUCATION CAN BE BRIDGED, (2) VOCATIONAL AND TECHNICAL EDUCATION DIFFER FROM ACADEMIC EDUCATION BUT NEED NOT BE INFERIOR TO IT, (3) EFFECTIVE TEACHING OF BASIC LEARNING SKILLS IS ESSENTIAL, AND IT MUST START EARLY IN A CHILD'S LIFE, (4) TECHNICAL SKILLS ARE BEST TAUGHT TO MATURE STUDENTS, (5) TECHNICAL EDUCATION FOR GIRLS HAS BEEN LAGGING, (6) THE LIBRARY, COUNSELING, AND GUIDANCE ASSUME INCREASING IMPORTANCE IN TECHNICAL EDUCATION, (7) INVOLVEMENT OF THE COMMUNITY AND FACULTY CONTINUES TO BE ESSENTIAL IN PROGRAM PLANNING, (8) THE AVAILABILITY OF PART-TIME JOBS REDUCES DROPOUT POTENTIAL, (9) JUNIOR COLLEGES ARE OF INCREASING IMPORTANCE, ESPECIALLY IN VOCATIONAL-TECHNICAL EDUCATION, (10) THE USE OF FEDERAL FUNDS IS OF INCREASING IMPORTANCE, AND (11) THE GROWING COMPLEXITY OF SCHOOL ADMINISTRATION PUTS A HIGHER PREMIUM ON COMPETENT LEADERSHIP. (PS)

ADAPTING EDUCATIONAL CHANGE

TO

MANPOWER NEEDS

IN

QUINCY, MASSACHUSETTS,

AND

WOOD COUNTY (PARKERSBURG), WEST VIRGINIA

AN ACTION RESEARCH STUDY

Under the Direction of the Automation Project
of the
National Education Association of the United States
1964-65 - 1965-66
and Supported by
The Office of Manpower Policy, Evaluation and Research
U.S. Department of Labor

Abstract

September, 1966

Adapting Educational Change to Manpower Needs in Quincy, Massachusetts and Wood County (Parkersburg), West Virginia

Study conducted by the Project on the Educational Implications of Automation, National Education Association of the United States, 1201 Sixteenth Street, N.W., Washington, D.C. 20036, under Contract No. MDTA-34-64, Office of Manpower Policy, Evaluation, and Research, U.S. Department of Labor, 1964-66.

The link between the manpower needs of American society, especially industry, and the vocational-technical education program of the schools is a tenuous one. The present study, on a limited basis, sought out two representative school systems to examine present procedures and innovations, to stimulate change, and to prepare a report to summarize certain conclusions to be drawn from this pilot study.

Quincy and Wood County were selected for special collaboration although their experience cannot safely be extrapolated any more than could that of any American school system under local control.

The study focused on manpower training and development, including the resources and processes available in the community toward better planning, with emphasis on such converging factors as the professional staff of the schools, the receptivity to innovation, the limitations imposed by financial stringencies, the new resources available from federal sources, and the industrial and business environment. The study included special consideration for procedures designed to deal with the culturally deprived, school dropouts, and those adults seeking retraining opportunities. Newly emerging federal programs -- the Economic Opportunity Act is a prominent example -- played a major role in both communities.

Innovation can be stimulated, but the concern of the present study was to emphasize those aspects which could fruitfully be used by other educational leaders, probably after adaptations and changes, in their own communities. It comes as no surprise that change means controversy, for it means conflict between those who feel comfortable with the status quo and those who seek innovation. This type of conflict puts a premium on good leadership, with emphasis on human relations and the involvement of many of the forces affected by change.

While the focus of the study is on manpower requirements, training and changes, less spectacular aspects of school administration which relies on certain methods and procedures regardless of the content of the innovation were also studied. In Quincy and Parkersburg this was illustrated by the emerging decision to integrate vocational-technical education into the general comprehensive secondary school curriculum, with adequate provision for specialization. In Quincy this is expressed architecturally through a new vocational school, across the street from the old comprehensive school, but connected to it through an overpass which permits the sharing of relevant facilities and prevents fragmentation. Similarly, there has emerged a decision in both localities to provide much technical training after the customary 12 years of public education, by providing classes which also are accessible to former dropouts now ready to undertake retraining.

Both communities have greatly stressed the need for better guidance and are showing the results of this change. The availability of Congressional interest in this area, including the provision for federal funds, has been very helpful as the two communities sought and accepted all possible assistance, with little apparent

opposition from local critics and virtually no interference from federal authorities in the sensitive area of educational policies. Local leadership has been constructive and imaginative in upgrading educational opportunities for the disadvantaged and seeking to eradicate poverty from the community.

These and other changes, described in some detail in the report, have made possible several generalizations which should be useful as guidelines:

1. The gap between general and vocational education can be bridged.

2. Vocational and technical education differs from academic education but need not be inferior to it.

3. Effective teaching of basic learning skills is essential; it must start early in a child's life.

4. Technical skills are best taught to mature students, especially in the light of technological change and obsolescence.

5. Technical education for girls has been lagging.

6. Technological advance has put an even greater premium on counseling and guidance.

7. Similarly, the library assumes increasing importance in technical education.

8. Involvement of community and faculty continues to be essential, especially in:
   a) Planning for change
   b) In-service education
   c) Curriculum revision
   d) Instructional flexibility

9. Availability of part-time jobs reduces dropout potential.

10. Junior colleges are of increasing importance, especially in vocational-technical education.

11. Federal funds are of increasing importance. Local schools should use them and can absorb them with little danger of federal intervention.

12. Growing complexity of school administration puts an even higher premium on competent leadership -- ability, training, and skills.

Virgil M. Rogers
Director of the Study

VMR:nlb

PREFACE

October 15, 1966

The material in this report was prepared under a contract with the Office of Manpower Policy, Evaluation and Research, U.S. Department of Labor, under the authority of Title I of the Manpower Development and Training Act of 1962, as amended. Researchers undertaking such projects under government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor.*

In the fall of 1963, the staff of the National Education Association's special Project on the Educational Implications of Automation, having identified as one of the most crucial problems facing American education the reorganizing and reorienting of vocational-technical education to meet the nation's changing manpower needs in the face of a growing technology, approached the U.S. Department of Labor with a proposal that it support a pair of pilot studies in action research in two school systems in different parts of the country and with different types of problems.

The Project staff made a preliminary survey to choose two districts that might be considered typical city school systems with imaginative administrative leadership, whose communities gave definite evidence of being ready for educational innovation, particularly in the areas of curriculum, plant modification, and expansion to meet the educational demands of the majority of youth who do not continue to college after graduation. Two communities were found that met the criteria for this study: Quincy, Massachusetts, and Wood County, West Virginia.

Special attention has been given to the manpower training and development

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* Final report on MDTA Contract No. 34-64, "Pilot Program in Manpower Development To Assist School Districts To Modernize in the Face of Technological Change."

elements of the educational planning and programming. We have attempted to highlight the in-service aspect of the schools in the project reports as well as give attention to curriculum improvement. Also the extensive use of federal and private funds is emphasized.

To the officers of the Department of Labor and to the school officials and the faculties of the two cooperating school systems, we express our thanks for most cooperative working relationships.

Virgil M. Rogers
Project Director

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PURPOSES, PLANS, AND PROCEDURES

The primary purpose in establishing two centers to observe, collaborate with, and report upon was to have access to the processes of educational change and to share in the modernization of two school systems in the face of technological change and its demands upon public education, particularly at the secondary and postsecondary level. It was thought that these changes might then be described in such a way that others faced with similar problems might find help and encouragement in leading their own communities in educational innovations.

A working outline was developed in cooperation with the school officials which provided for--

1. Adapting educational programs to changing vocational-technical manpower needs in the public school system.

2. Adapting and adding to school plant and equipment where needed.

3. Providing for post-high-school education, especially further vocational-technical training.

4. Working with not only the school faculty and administration, but also the boards of education, community groups interested in quality education, and state departments of education.

5. Analyzing problems confronting the schools and the staff and exploring with the staff ways of overcoming these.

6. Visiting the schools periodically; meeting with staff, committees, faculties, student groups, and citizens; and studying the special projects and programs designed to promote better educational opportunities for those who would profit from preparation in vocational-technical education.

7. Preparing a final monograph in the form of a report which would be of use in other schools over the nation which are struggling to meet the growing demands on the schools to equip youth to face adult responsibilities in a strikingly

different world of work.

To these ends, special attention has been given to how the school system went about meeting changing manpower needs, improving the holding power of the school, making counseling and guidance more effective, bettering instruction, adapting the school plant for vocational-technical needs, expanding post-high-school education, interrelating vocational and academic education, introducing modern educational equipment, meeting the needs of the disadvantaged, involving the community in educational planning, taking advantage of federal legislation relating to education, getting and using federal and state subsidies and foundation grants for special studies and projects, upgrading its faculty through in-service education programs and better working conditions, and treating various other phases and facets of the total educational operation.

The Pilot Study: Some Questions and Issues

This pilot study covers two communities -- Wood County and Quincy. Its focus, of necessity, is not so much on the tested, traditional, and prevailing school policies and practices, but rather on the newer questions, on controversy, on innovation, and on issues which are often not yet resolved.

In preparing a report on the pilot study, we had in mind certain questions, often difficult and touchy questions. Some of these the report answers in detail, others only in part; some are still unanswered. For this lack of completeness we make no apology, since the only other honest alternative is to bury the questions so that the missing answers will be less conspicuous.

An obviously controversial issue is the role of vocational-technical education: Should it be integrated with the general comprehensive school curriculum? Similarly, there is probable agreement on the need for a modernized program of vocational-technical education, but the disagreements will emerge quickly when there is an attempt to spell out what different spokesmen have in mind when they say "modernized." After all, one group would update bricklaying (for instance) by using a bricklaying machine; another group would hold that prefabrication and reinforced concrete have changed the entire purpose and content of a course of study suitable for future bricklayers.

This report will touch on similar problems: Where should we teach vocational courses--in the highschool or in the junior college (or technical institute)? Should vocational education include girls? Should it change its focus from craftsmen to technicians, from skilled labor to a comprehensive approach for <u>all</u> students? For that matter, how does this relate to the college-bound group and their need to have some appreciation of manual skills?

While these questions concern policy, there is another cluster of problems which deal with its implementations. Should the faculty share in the process of educational planning? What is the role of counselors in the vocational-technical

sequence? How should the faculty be involved in its own in-service education and updating of skill? What about faculty attitudes toward students who are not college bound? What about citizen participation and involvement?

More broadly speaking, there are problems of school dropouts and community attitudes. Will the new curriculum increase the holding power of the schools? Can there be an effective meshing of new federal programs which are not necessarily under school auspices? What about relations with the state employment service, especially the new Youth Opportunity Centers? What about the overriding question of federal funds -- their use, their availability, and their impact at the local level?

As we note in the concluding chapter, some of these questions -- and their answers -- tend to look like perennials: they reflect good administrative practice, good planning, and good organization, applicable especially in a public school setting where most actions must be taken in public view.

Other practices and procedures are new, either as an answer to technological and social change, or as a response to the educational efforts of the federal government which, during the past few years, have been tremendously important, whether in school, as in the National Defense Education Act of 1958, or outside of normal school channels, as in the Economic Opportunity Act of 1964.

The experiences of the two communities covered in this report neither are typical nor should be used as models. The contents of this report, however, should provide an opportunity for some new insights into the process of change.

CHAPTER I

Quincy and Its Public Schools

A number of reasons led to the selection of the Quincy school system for this project. It had able and imaginative leadership which was seeking to improve education for the occupationally oriented student as well as for the college bound. Its school committee was dedicated to dynamic education. It was a school community with problems, but on the move toward their resolution. It was, moreover, uniquely situated to demonstrate how a community rich in history and tradition can nevertheless take creative measures to keep itself in the mainstream of modern American life.

The historic old New England community of Quincy, Massachusetts, which gave the nation such leaders as John Adams, John Quincy Adams, and John Hancock, was explored by Captain John Smith and settled four years after the Pilgrims landed. It was incorporated in 1792. The school system dates from 1795, and its first high school was built in 1852.

The community has been well-known for its support of public education from early times. The "Quincy movement," under the leadership of Colonel Francis Parker, first appointed superintendent of schools in 1875, gave it a national reputation.

Located along a 26 mile ocean shoreline on Quincy Bay harbor near Boston, this New England industrial city of approximately 90,000 people has taken great pride in maintaining its identity and individuality in spite of the expanding urbanization of eastern Massachusetts.

School Organization

Quincy has a school enrollment of 15,730 students, a faculty of 873, and a budget (1966), exclusive of junior college, of $8,500,000 on an assessed valuation of $184,000,000. (The assessed value is not comparable with that of Wood County, since the percent of true value is not the same).

There are 9,070 pupils in 23 elementary schools; 3,147 in five junior high schools; and 3,248 in two senior high schools, with 273 enrolled in the vocational school and 1,200 enrolled in junior college, 434 of whom are full-time students. The system extends from Project Head Start (nursery school) through junior college.

Three years ago, when the superintendency became vacant, Robert E. Pruitt, who was then serving as associate director of the University of Chicago Laboratory Schools, was appointed to the post.

CHAPTER II

Planning for Innovation

Let us here emphasize that the main purposes of the study and collaboration with the school system were to provide findings that might help other schools reorient their vocational-technical programs, assist them in identifying implicit opportunities for shifting to broader and more general concepts of vocational education, and suggest means of adapting educational systems to current and future technological requirements.

A number of steps were taken to encourage innovation and adaptation to meet changing educational demands and new vocational-technical needs. The superintendent's advisory committee, or council, began an intensive study of educational problems and needs soon after the new superintendent assumed office. This resulted in the identification of some of the areas of special concern, to be described later. The Quincy Teachers Association, which was fortunate in its election of a president, also had become concerned with educational improvement, and the proposals it made were warmly received by the school administration. The Parent-Teacher Association was encouraged to share in looking at the school's needs and to discuss these with staff and committees. The school committee (board of education) received continuing reports at the regular meetings on the problems and areas of education which were

being identified as needing special attention. Teachers, principals, and counselors were encouraged to report problems or concerns which they felt were worthy of study by the administration and the school committee. Questionnaires were sent out to Quincy High School graduates for information as to what had happened to them educationally or occupationally following graduation. The findings indicated that about 40 percent of the groups graduating from high school continued their education in college, university, junior college, nurses' training programs, or business or technical schools. In a city of Quincy's type, this percentage was far too low. Only about 5 percent were graduating from "trade school."

Other surveys showed that Quincy, along with the rest of the state, had very low dropout rates ranging over the years from 3 percent down to 1.84 percent of the enrollment of each graduating class; however, the serious problem of failure to take courses which might lay the groundwork for vocational preparation on the part of those not going on to college appeared as a critical item for attention.

In the words of the superintendent, "We have tried to look at all the educational needs of our citizenry--from the pre-schoolers to the senior citizens--from the most gifted to those with very limited talents. We have tried to envision the quality of staff and the professional upgrading that must take place if we are to meet the demands. We are looking years ahead to the future regarding the school facilities and equipment required to do an effective job."[1]

Industry and labor were interviewed, and their committees worked with the school planning groups with a view to giving the school people the hard facts regarding manpower needs, industrial expansion, technological change taking place and anticipated, and the nature of the pressures and demands upon the workers in the foreseeable future as labor and management envisioned it. Excellent cooperation was given, and the groundwork for understanding and support for future

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[1] Pruitt, Robert E., School Trends, February 1966.

increases in school budgets was being laid; this, the reader will later see, paid dividends to the Quincy school system and to the children, youth, and adults of the community.

As planning moved forward, the school budget became a critical factor, as substantial annual increases were required. With a rather slowly rising assessed valuation, and with one of the lowest state support rates for public schools, the system found itself seriously handicapped in implementing innovations calling for added outlays. The administration regrouped its forces and proceeded to explore federal funds which, by fortunate coincidence, were beginning to become available for those schools which had "tooled up" for educational change to meet the new demands of a society in the throes of a technological revolution. The school administration, sensing the slowness of government operations, simultaneously approached private foundations for assistance. The administration presented carefully designed proposals for grants to study or experiment with significant innovative kinds of educational practices and programs. School officials took advantage of federal legislation dealing with the culturally disadvantaged and the unemployed youth who needed parttime work to help them remain in school and of the school support legislation to assist the schools in improving their facilities, equipment, and personnel; they used the Poverty Act funds for retraining the unemployed. Quincy became one of the first cities in the state to submit qualifying proposals for federal grants under some of these laws newly enacted by the Congress.

In 1963, just prior to the beginning of the pilot studies, the high school program was described as typical of the traditionally organized New England high school. It provided for a college preparatory course, a commercial course, and a general course. The individual student elected one of these courses and followed the prescribed patterns in elective subjects through to graduation. Very little

opportunity to "cross over" course patterns was in evidence. "It is a certainty that some of the students at Quincy High Schools were not being challenged to the extent of their abilities and it is also a certainty that some of the students were overwhelmed by the challenge placed on their abilities to achieve in the regularly scheduled heterogeneous (mixed ability) classroom climate."[2]

In the midst of the early study and planning for meeting the demands of the changing manpower situation, a forward-looking challenge to education and school communities was sounded by the Willis-Harrington Report on Quality Education for Massachusetts. This two-year, statewide study authorized by the state legislature gave strong support to the educational leadership for innovation in Quincy schools when it stated:

> Public education must be the primary public business. Where it is not, it must become that; where it is now that, its position must be strengthened.
>
> Expenditures for quality education will do much to help restore education in Massachusetts to the level of pre-eminence as envisioned by Horace Mann and demanded even more urgently by today's society.

As planning got under way, the superintendent of schools reported to the community that "the school committee and members of the professional staff have accepted the call to leadership. We have moved forward in the design of a new vocational-technical school and a research effort relating to all non-college bound students that have a promise of providing our youth with the best possible education for their world. We continue, at an accelerated pace, our efforts to upgrade our college preparatory programs."[3]

One of the real concerns in educational planning for change, and particularly for reorienting the curricular offerings in the area of the non-college-bound

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2. Superintendent's memo to high school principals headed "Education in Our Times." Quincy High Schools.

3. Pruitt, Robert E., School Trends. February 1966.

student, was the necessity for keeping in close communication with the vocational education authorities in the Massachusetts State Department of Education and the U.S. Office of Education, since their blessing was essential to success and also since much of the financial resources for plant and equipment for the expansion of vocational and technical education facilities had to come through them.

The school staff was reorganized to give greater recognition to this neglected side of the school and college curriculum by the appointment of Maurice Daly, assistant superintendent, as director of vocational-technical education and chairman of a joint committee of staff for planning the necessary facilities to meet student demands and manpower needs.

Through a series of joint meetings with state and national officers and much discussion and weighing of evidence based upon surveys by state and local communities, a remarkable degree of consensus was reached. The painful process of modifying traditional views, of reexamining established practices and policies with reference to curriculum, scheduling of classes, plant design, and equipment, took an inordinate amount of time and patience. As will be reported later, a remarkable degree of agreement on radically new designs was achieved.

CHAPTER III

Education for Changing Manpower Needs

The educational ferment in Quincy, which prompted its inclusion as one of the two pilot centers, has been and continues to be generated in part by the stimulation and action growing out of the several cooperating committees and councils organized by the administration to share in the development of educational policy.

Among the groups which contributed ideas and shared in the deliberations are the superintendent's cabinet, the executive committee of the Quincy Teacher's Association, curriculum committees, the trade and technical advisory committee, the Junior College Development Council, the Parent-Teacher Council, the Community Action Council, and other smaller citizen and teacher committees and task forces concerned with limited objectives.

Out of these deliberations, the educational studies made by the local authorities and the state department of education (Vocational Division), and the research and reports from other systems made available by the superintendent, there gradually developed a strong consensus that the comprehensive high schools did not and probably could not meet the accepted educational standards and needs of youth today, particularly in light of the new technical requirements in the world of work. There crystallized a point of view that the high school should plan its vocational curriculum so that it would be preparatory to advanced study and training just as high school academic curriculums are preparatory to college and university study. It had become evident that many high school youths do not go on to any further study beyond graduation and therefore certain programs which lead to entry employment in semiskilled services and certain apprenticeable occupations should continue to be offered by the high school. Such programs would assure non-college-bound students and the potential dropout students an opportunity to get definite prevocational training and some basic skills upon which they might build technical training as they matured and as opportunities arose.

It should be emphasized here that for some years the director of vocational education had been deeply concerned about the inadequacies of the "trade school" offerings and its isolation from the mainstream of the comprehensive high school. He was a moving force in involving state and federal authorities in the Quincy educational problems and planning.

Evidence of Need for Vocational-Technical Educational Reorganization

The high percentage of "holding power" on the part of secondary education in Quincy is a testimonial to the quality of educational offerings and the effectiveness of motivation in the schools; however, the holding power rate is in part the result of the low percentage of families that might be classified as culturally deprived or disadvantaged. There is a tradition in this New England community of schooling at least through high school. This ideal is simply not adequate, however, for the age of technology, with its increasingly fewer jobs for unskilled or semiskilled

workers, it's "no room at the bottom" for the person short on salable skills.

Studies made by the school indicated that in 1963, of 3,376 secondary students enrolled, only 279 (8.3 percent) were taking courses in the "trade school" (vocational-technical). Of the graduates, numbering some 1,139, 63 or 5.5 percent were from the vocational-technical program.

The 812 graduates of the class of 1963 who were reported on to the state department in October were distributed as follows:

Attending a 4-year college - 191 (23.5 percent)

Attending a junior college - 40 (5 percent)

Attending various technical schools and nurses' training - 103 (13 percent)

This makes a total of 334 (41 percent) going on for further study and 478 (59 percent) with no plans for further study and no vocational or technical preparation for jobs beyond what they might have received in the academic high school courses.

The studies and discussions helped the school staff point up the glaring gaps in Quincy's educational planning. The college bound were well cared for, with excellent preparation for continuing their education, and the schools' graduates are found in most of the top-rated institutions of higher learning across the East. More than half of the graduating class had no plans, however, and were ill-equipped for skilled work, aside from those who prepared as beginners in the secretarial field and about 63 who graduated from what in the past was called "trade school."

Conferences with the school committee and advisory groups of citizens helped the staff to bring the community to recognize that occupational education in the broadest sense is not only legitimate and desirable in our time for large segments of the secondary and community college population, but an absolutely necessary component of the comprehensive educational program. Such bold approaches on the part of a few courageous communities under the leadership of perceptive schoolmen and women can help vocational-technical education acquire the respectability necessary to assure it status on the level of college preparatory curriculums in our schools.

It was recognized that along with the vocational offerings, provision must be made for school attendance with part-time employment arrangements for those youth needing to earn while they learn. The Economic Opportunity Act of 1964, the Amended Vocational Education Act of 1963, the Amended NDEA Act of 1964, and the Elementary-Secondary Education Act of 1965 all make failure now unnecessary for any youth who has the capacity for any form of skilled or semiskilled occupational training. The Quincy community was one of the first in the nation to recognize this and take prompt and effectively planned action to profit from these new national resources made available by the President and Congress. As a consequence, Quincy was among the first cities in New England to get grants for Project Head Start and one of the first to provide youth needing part-time work with such opportunities through the Neighborhood Youth Corps administered by the U.S. Department of Labor.

Some Basic Steps Toward A More Comprehensive Education

A fresh approach to teaching the basic skills or tools for learning was explored all along the educational ladder. These skills--especially the language arts, facility in numbers, civic and economic competence, and human relations--received added attention through committees, faculty sessions, departmental planning, professional reading, and teacher institutes or workshops. It was recognized that literacy is absolutely necessary for the bricklayer as well as for the office manager or librarian. The approach was the analysis of what competencies and skills are required of all who accept skilled or semiskilled jobs. It was obvious that to get a job, the worker must be able to complete certain application forms, fill out written reports, and prepare income tax documents that are accurate. Each is expected to develop work schedules and to fill out special reports on accidents, work orders, requisitions, and inventories. Most of these skills can and should be taught to make certain that students have foundations in general education preparatory to skills training.

The curriculum redesigners recognized the importance of intelligence for particular types of technical positions; however, the staff agreed with what some specialists in curriculum planning have been arguing for some time - that most people in our classrooms have been blessed with a more generous endowment of intelligence than their education or training has enabled them to cultivate, recognize, and use. The objective here is for the general education opportunities tc be such that each student will be encouraged to approach his full potential in the development of his basic learning skills, no matter how generous or limited his native endowment. There is implicit in this approach a recognition of the need for adults to have a fair command of the fundamental tools of learning and of the injustice perpetrated by sending a certain number of youth into the world to support themselves and their families with only manual skills or with the strength only of their muscles. If they are to have any adaptability in the world of work, they must be able to handle written instructions competently and learn new skills as these are needed.

Making Counseling and Guidance More Effective

This vital department of the school has accepted the fact that the times call for fresh approaches to helping students and faculty identify ways and means of working together to ensure the necessary adjustment of each student to the school situation so that all will find conditions conducive for continuing their education as long as educational growth is evident or suitable job entries are available. The emphasis in counseling is on "knowing thyself," helping the student to come to his own decisions.

The guidance program improvement has resulted in--

Increased guidance service in the elementary grades.

Increased professional assistance to the counseling personnel in obtaining and presenting educational, vocational, and related information.

Introduction of group guidance programs in elementary-secondary education.

Preparation of a guidance-oriented project focusing on student needs in disadvantaged areas.

Increased involvement of administrative and teaching staff in in-service activities.

Presentation, at the secondary level, of large group programs highlighting the implications of automation.

Assignment of staff assistants to the special committee concerned with planning the curriculum for the vocational-technical schools.

Intervisitation by junior high and senior high school counselors.

Enlargement of the staff of school social workers attached to the guidance program.

In-service programs for guidance staff and administrators involving personnel participants from business and industry.

Conferences between guidance personnel and local personnel managers from business and industry.

Provision for clinical, psychological, and psychiatric service for special cases when such help is indicated.

The Review Board

A new type of collaboration in the interest of the pupil who may be in serious difficulty is in the experimental stage. Here, again the main effort is to use all possible expert counsel in helping child, and sometimes parent, to find himself.

The principal initiates a meeting of the review board through the school guidance worker. This meeting is a conference involving the principal, the teacher, the reading consultant, the psychologist, the school nurse, the guidance staff worker, and consultants as needed from the mental health clinic. The function of the board is to bring the total resources of the community to bear upon the case with a view to diagnosing and agreeing upon constructive action to assure the best possible adjustment for the child. This may entail school and home cooperation in making adjustments to meet the child's special problems and needs.

In the Quincy plan, the reluctant learner has become the special concern of the counselor as well as teachers. This person may be a professional guidance staff member, a principal, or a special teacher. Almost always the home is involved.

Such counseling takes on increased importance in education as it reflects the social patterns of the home and the changing ways of urban and suburban living. The schools find that the growing divorce rate; the trend toward both parents' working outside the home or, in some cases, being heavily committed to social life; and the teachers' being loaded with various types of assignments serve to push students toward a sort of limbo of "forgotten creatures."

The Quincy system has determined that guidance shall be adequate to the needs, not only of the reluctant learner, but of all children and youth and of their parents and the school's teaching staff. Such a policy is paying profound human dividends in a remarkably low dropout rate. Experience is accumulating to indicate that the slow learner, the disadvantaged child, is not an unwilling student who is struggling against learning; rather he is hesitant, sometimes belligerant, disinclined toward the school environment for a whole syndrome of reasons. In such cases, deep-seated reactions are involved, and often, the more capable of learning the student is, the more negative may be the school behavior patterns, the emotional and mental struggling.

The study of new guidance procedures is inevitably related to the school's philosophy of discipline. Teachers and guidance people are finding that once the dropout has returned to school and effective use is made of the "self decision making" approach in counseling, once his course work is adjusted to his interests and potential and the classroom atmosphere is characterized by a discipline free from any suggestions of being punitive or faultfinding, his digressiveness and frustration begin to evaporate. In this environment, new values with broader and deeper dimensions can be brought into play that may very well transform a student's whole attitude toward schoolwork and toward life. Such vital teaching is giving new meaning to learning and fresh hope to the learner.

Manpower, Training, and the Disadvantaged

The problem of relating to the child considered disadvantaged because of one or more conditions affecting his life, is dealt with in a number of ways.

The federally supported Project Head Start, in which all children from homes coming under the formula for attendance are being helped to close the gap between themselves and the average kindergartner entering school, is proving its worth.

Despite the fact that Quincy has a low dropout rate, plans are under way to eliminate the dropout at all levels. The point of view is that much of the difficulty in keeping youth interested in schools initially develops in the early grades. Quincy is making a massive approach to correcting this phenomenon which appears as a central factor in junior and senior high school. Project Head Start is only one approach through a coordinator for all classes and instructors concerned with the handicapped. Primary and intermediate "educable" classes have been substantially increased while class enrollment is kept low. Speech therapists assist those needing such help.

The regular programs for the exceptional child have been continued and improved.

Different elementary schools are experimenting with nongraded plans, flexible groupings, and cooperative teaching procedures.

Extensive use of the NDEA funds for purchase of special instructional equipment has greatly extended the effectiveness of the teachers. After-school activities for the students who can profit from such opportunities are provided. Summer school opportunities for enrichment as well as catching up are offered.

Released time has been arranged for teaching staff to assist the disadvantaged and to develop more effective motivating techniques. Diagnostic and remedial reading programs help to assure most pupils the opportunity to acquire good reading skills.

Experimentation with parent conferences in place of report cards, with followup summaries of the conference and the pupils' progress described, is being conducted in some schools, with a view to better bridging the gap between pupil progress and parental understanding and cooperation.

Stress has been placed on the primary and elementary grades because it is here, the staff contends, the troubles begin. But the junior and senior high grades also are concerned with the disadvantaged and their getting ahead educationally.

There are three programs to assist those junior and senior high school youths who for financial reasons need assistance to continue in school. These are supported by federal funds made available through the Vocational Education Act of 1963 and the Economic Opportunity Act of 1964. Quincy is not a poor community, but the school officials have recognized the needs of many of its youth for supplemental aid and have made federal dollars available to them. These include the Cooperative Work Experience Program, the Work Study Program, and the Quincy Neighborhood Youth Corps Program.

The art department has cooperated by offering special craft programs as electives for students who did not find satisfaction in the conventional art courses; field trips to the museums and art galleries in the Boston area also have been used to advantage. Special classes for the youths who need special help and who must receive much individual attention are provided in high school.

Attention to the Gifted

In addition to many course offerings that challenge the most able students in junior and senior high school, special opportunities to do creative and advanced work are assured through Quincy's "Gifted Child Program." This program, which begins at grade 5, includes pupils of high achievement with IQ's of 130 or above who are highly motivated, socially mature, and well adjusted as determined by the principal and teachers.

In the senior high school program, students from the Advanced Placement Center are evaluated near the end of the third year in junior high school. In accordance with these evaluations, they are given advanced placements in specified academic subjects, admitted to "great books" discussions, given privileges of taking advanced work in summer at universities in subjects ranging from advanced algebra to Chineese. These students probably represent the scholars of tomorrow's universities.

School Library Service - Expansion To Meet Individual Needs

Three years ago, the school library service was largely a "book room" or study

hall environment with an average per pupil outlay of about $1 for high school, less for junior high, and nothing for the elementary schools. Until recently, the library was, as in most school systems, merely a book appendage associated with the study hall. No planning had been done on developing the library as the hub of the school or as a center for the collection and distribution of instructional materials. The transition is an interesting study in the dynamics of educational change. The administration and advisory staff became sensitive to the lack of educational services in this field and began to move. Principals and teacher committees examined the problems and made recommendations. Decisions were made in the central office to ask for substantial increases in the school budget for library services. A director of library services was appointed. In 1964, the book budgets were doubled. Clerical help was provided in the existing libraries, the staffs were doubled, and more space was found for library services. At the same time, studies were initiated with reference to the needs for elementary school libraries.

Over a three-year period, the library budget has been expanded three-fold. The school made application for additional library funds under the ESEA Title II and received an additional boost of 100 percent for instructional materials. The director of library services has expanded the program and with the support of the superintendent is asking the School Committee to provide for a library in each elementary school, with an elementary librarian especially trained for this phase of work eventually assigned in each elementary school. The expansion of budget envisions five steps in the program, every school to be fully staffed with a library and librarian and $6 per student to be allotted for books and instructional materials--in other words, a 500 percent increase over the 4-year period in library support.

The administration and staff, in cooperation with the director of libraries, are working diligently to bring to Quincy a supplementary educational resource center which would feed into the individual schools and into the individual school libraries. Such a service, it is hoped, would give almost unlimited enrichment

resources for all students and all teachers. It would be financed primarily from federal school funds. This program, it is admitted, is for the future--present effort is to update school libraries.

The long-view planning for library services envisions programs for computer control through automation and data retrieval procedures that provide fantastic services from remote sources to the consumer student-teacher-researcher at the touch of a panel button.

With a view to giving the Quincy students a better understanding of how our economy functions and to making students functionally more literate in matters touching the family budget, consumer education, and earning a living, the school authorities took advantage of an invitation of the Joint Council on Economic Education and the New England Economic Council to accept a grant to share with 20 other school systems of the nation in the upgrading of the teaching of economics.

The pilot studies are conducted in two elementary schools, one junior high school, and two senior high schools. Special institutes have been conducted for the teachers involved, and funds are provided for consultancy service and rich supplementary instructional materials. The findings not only will be used to upgrade the city schools but will serve as a guide based upon the national studies for schools over the nation.

This is one more direct effort of the school system to make these basic learnings more thorough and effective as a foundation for vocational training and retraining in the future. Project DEEP (Developmental Economic Education Program) is making its contribution to the educational ferment which suggests innovation and renewal at work in a dynamic public school system.

Unsatisfied with the educational program's impact upon its students' sense of values in our society and recognizing that in an urbanized, technological, and automated culture the problems of youth (and adults) have multiplied and intensified in recent years, the school officials accepted an invitation of the New England School Development Council to become one of five selected school communities in which an action-research project in the area of student-teacher-parent values was

to be conducted.

The project is now in progress; its purposes are--

To explore the values held by students, teachers, and parents

To note alignments and nonalignments within the value system of youth and adults

To assist youths, through curricular and extracurricular activities, to cope with and upgrade their value systems.

The findings are to be shared with the New England School Development Council member schools. The project is under the direction of Lincoln Filene Center for Citizenship and Public Affairs of Tufts University.

The project, as it has progressed, has become known as COPE. It is concerned with the general increase in delinquency and rebellion against authority among high school students and is attempting to put into action programs to strengthen student values and to upgrade their value systems. Students and faculty teams from Tufts are working with Quincy teachers in carrying on the experimental work. The discussions; the exchanges of views; the evaluations of current behavior patterns, styles, customs, and excesses of youths; and the critical analyses of the mores and current value systems of youth and adults intended to help individual young men and women COPE with and raise the quality of their own systems of values, are proving to be significant innovating influences in the progress of modifying educational practice to meet the needs of the individual student.

CHAPTER IV

Providing for Vocational-Technical Education

Some forty-five years ago, a university professor by the name of Paul Douglas (now Senator) made a cogent criticism of the type of vocational education then in vogue. His words are pertinent to the current study although they were written in 1921:

> The leaders of the vocational educational movement have hitherto been reluctant to face the facts of modern large scale production with a specialization of labor. They have been trying to equip

> the boy with an education he does not need and cannot utilize. The sooner they cease to think in terms of the handicraft era, the greater the chances will be of creating an educational system that is worthwhile.[4]

The tendency to isolate vocational-technical education from the mainstream of American education has prevented broad integrated educational offerings in this area from becoming general practice; also, the small secondary and community college units have militated against such developments.

In the past half-decade, a combination of developments has set the stage for a virtual revolution in vocational-technical education. The economy of the nation, the shifting social-cultural patterns, the political climate, and the urgent demands for a new kind of education have contributed to these developments.

These developments, which have been a part of the two senior high school faculties' thinking, planning, and action, include--

The rapidly advancing technological revolution, sometimes referred to as the age of automation.

The unemployment situation among our youth and, particularly, among the poorly educated adults

The population explosion and its complicating factors in school costs and crowding

The massive attack upon poverty and juvenile delinquency by the federal government

The dramatic change of attitude on the part of Congress under President Johnson's leadership with reference to federal support of education, resulting in the passage of a series of laws supporting vocational-technical education.

The forces that play upon American education are producing a manpower training program more closely adapted to the needs of youth while better keyed to the nation's manpower requirements.

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4. Douglas, Paul. American Apprenticeship and Industrial Education. New York: Longman's, Greene & Co., 1921. p. 123

The two pilot schools (Quincy, Massachusetts, and Wood County (Parkersburg), West Virginia have seized upon the dynamics of these forces and exploited every opportunity to find support at the local, state, and national levels, from public and private foundation sources, to implement their planning for a fresh approach to vocational-technical educational offerings.

Preplanning

The planning for the vocational-technical school began with the administrative staff's invitation to the Massachusetts director of the Division of Vocational Education and his staff to survey the needs for an expanding program of vocational-technical education. At the time (1963) the Quincy trade and technical school attracted fewer than 9 percent of the senior high school students to enroll in its programs. Of the 1,139 graduates, only 5.5 percent were from the trade school. Yet that same year, 58 percent of the high school students finishing their secondary school careers had no plans for further study and no vocational or technical preparation for jobs beyond the normal secondary school academic and commercial curriculums. Most were without salable skills at a time when the machine could do the work of an average high school graduate,[5] and more than a million older youth were on the streets and without prospects of jobs.

The State of Massachusetts Department report strongly supported a comprehensive overhaul and broadening of the secondary and postsecondary curriculum for the non-college-bound student and urged that Quincy inaugurate a program which "could be a model to be imitated by other schools."

The Markham Report reviewed its work; the survey of industry; and the inventory of job opportunities then and in the probable future, including "the close proximity to Boston and Route 128, as well as the Expressway," and concluded that a modern vocational-technical school would provide unlimited advantages in being located

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5. According to Secretary of Labor, Willard Wirtz.

at Quincy, which was recognized as taking the lead in dealing with the educational problems of older youth.

A survey of employment (1964) in Quincy proper disclosed that 75 percent of the Quincy working population were engaged in occupations for which specific training is required. Of these, according to the survey by the Division of Vocational Education of the State Department of Education, the occupations were 9.7 percent professional, 35 percent trade and technical, 14.1 percent commercial, 11.2 percent distributive, and 3.7 percent health services (other than professional).

Further evidence of demand for expanded vocational-technical training was the very great response of workers seeking improved skills through enrollment in the Manpower Development Training Act program, which reported enrollments, between April 1964 and January 1966, of more than a thousand persons, with 47 full-time and part-time instructors in the program and with a budget in excess of a third of a million dollars.

With the approval of the School Committee in 1964 to increase the tax rate to support such a plant and the state and federal provisions for substantial assistance, the planning got under way in earnest.

Advisory committees were established which included representatives from labor, management, and the public to work with the committees from the teaching and administrative staff. Advisers representing the specific crafts and service also were appointed, to assist in advising the faculty as it determined just what the new school curriculum content should be. This counseling service by the men on the job, combined with an extensive research program in the vocational-technical curriculum, has been a most significant factor in establishing procedures, guidelines, and research as the new curriculum came into being.

Out of these deliberations, which at times included not only the school staff and members of the School Committee and Quincy citizens, but also Masachusetts State Department of Education representatives, U.S. Office of Education staff members, OMAT Project consultants and architects, engineers, educational consultants and others, came a positive and far-reaching program of action,

The outcome of the elaborate planning, consulting, exchanging of views, and occasionally healthy argument was a measure of consensus to do the following:

1. Provide comprehensive offerings for vocationally oriented students ranging from the unit skills through high-level technology.
2. Provide grade 10 curriculum after junior high exploratory programs which are to be job-family oriented, with progress based on more specific job specifications starting in grade 11.
3. Provide programs that will be individually tailored to allow upward or downward movement, including college transfers, in terms of ability, or lateral movement in terms of special objectives.

As to plant, there was a measure of consensus, after heated arguments, which called for a building that would permit--

1. Individual scheduling and flexibility of grouping.
2. Shop areas that will be most efficient in use of staff facilities and equipment.
3. Flexibility in building design to permit maximum space utilization with changing educational programs resulting from changing technology.

In setting a policy of operation, the staff finally reached an agreement in these words relating to all high school students: "We must work out programs and program compatibility so that all students are served and brought to a maximum achievement according to individual capacity."

Curriculum Planning (Vocational-Technical)

The Quincy staff, recognizing that they were among the first in the nation to alter the course of vocational-technical education, decided that they needed additional help in exploring more completely what the nature of the new program should be and how it should best be integrated into the comprehensive high school-junior college complex.

The superintendent got School Committee approval to invite The American Institutes for Research to participate in an extensive curriculum research project called "Development and Evaluation of an Experimental Curriculum for the New Quincy (Mass.) Vocational Technical School," under the code name of Project: ABLE (to help each student succeed in his schooling insofar as he is ABLE).

The purpose of this special project, for which federal funds were obtained for a five year study, was to "provide each student not in the college preparatory program with an opportunity to achieve competency in the skills and knowledges of his chosen field of work, in his role as a citizen, and in the independent pursuit of self-fulfillment and new learning."

The project envisioned a curriculum that would involve students, staff, and facilities of both large high schools, the junior college, and the vocational-technical school and include 70 percent of all secondary youth in the community.

The planning, which is done by a staff drawn from AIR and the school system, many of them on a part-time basis, plus consultants from the outside, is much concerned about "flexibility,""relevance," "individual differences," "breadth" (of educational experience), and "guidance."

These elements are being researched quite exhaustively and should provide valuable findings for the nation's educators in this field. Project: ABLE is analyzing the requirements of many jobs with broad vocational areas for common and related skills, with a view to introducing these into the curriculum. With the emphasis on versatility, flexibility, and discovery, it is hoped the graduate will be highly motivated to continue his learnings throughout life.

Recognition of variations among all students in learning; retention; utilization and mastery of knowledge, attitudes and skills; and emphasis upon materials has been fully accepted. Organization, schedules, and instructional techniques are undergoing extensive study and research intended to distill the best for a broad comprehensive secondary-community college-continuing education complex. Guidance is getting an intensive examination with the help of the Department of Guidance and Counseling. In support of updating guidance, ways are being studied

to increase the students' exposure to exploratory training experiences and observation of workers on the job and assessment of their individual capacities and aptitudes in order to help them over the rough spots, assisting them and the faculty to evaluate and assess occupational potentials. One very significant study calls for tailoring curriculum to the individual student in such a sequential way that the crucial decision of specific career choice is deferred until alternatives are narrowed and evidence is accumulated to serve as guideposts as the student approaches his capacity for proficiency in the area of training.

Identifying Job Families

One of the major concerns of the research study is to identify occupational clusters with certain common skills characteristics as job families for intense study and analysis. Eleven such groupings have been identified to date. These job families contain some 1,051 definite jobs which have been identified and described as possible candidates for inclusion in the training program. These jobs have been grouped into 30 subfamilies on the basis of task similarities. As data on required skills, knowledge, etc., are collected, these will be more fully refined and grouped within the 11 job families established at present.

These job families are--

- Electro-electronics
- Metals and machines
- Power mechanics
- General woodworking
- General piping
- Food preparation
- Computer data processing
- Health occupations
- Graphic and commercial arts
- Home economics
- Business education

Project: ABLE is incorporating the total curricular needs and requirements as it identifies them in the process of planning; thus the so-called academic subjects are very much a part of the total vocational-technical study.

The traditional secondary school curriculum provides a limited selection of vocational offerings for girls; however, the new school provides training opportunities

for girls in many technical areas described later in this report.

Specialized skill development training for disadvantaged students will either prepare them for entry occupational jobs or provide remedial activities so that they may attain competency in one of several higher levels of training and education within the school. The emphasis on an operational program of the school which embraces individualized instruction, individualized scheduling, and routing students through a variety of activities that will lead to confidence in their chosen occupational family field is especially suitable to support and encourage the exceptional youth who may have added physical, emotional, or social problems with which to deal. Provision for advisement and curriculum planning assures the majors in academic programs who desire to schedule technical courses in addition to their academic schedule that they may do so without sacrifice of or embarrassment to their main objectives. The reverse also applies: Vocational students may select foreign languages and such other academic subjects as they consider essential to their occupational objectives.

The curriculum planning and facilities not only provide for entry occupational skills and pretechnical and transfer programs, but also ensure facilities and resources to meet the needs of returning dropouts and adults returning to school during or after hours to upgrade competencies or replace obsolete skills. The staff has made provision for differentiated curriculums on a continuum from the practical to the theoretical geared toward--

a. Unit skills

b. Vocational competencies

c. Pretechnical and technical training

Yet the program of offerings is to be sufficiently flexible to allow vertical and horizontal transfers and special arrangements and cooperative projects with business and industry. Every aspect of the vocational and technical school planning represents a complete break with the traditional lock-step system, which did not

permit individualized instruction. There has been great stress placed upon preserving flexibility of curricular offerings, programming, and building and equipment, with a minimum of compartmentalization.

Plant Development To Accommodate Curricular Offerings

The vocational-technical facility will accommodate 1,100 secondary and post-secondary people, including junior college students and out-of-school adults desiring retraining and opportunities for course offerings. The plant is a part of a larger complex of buildings including the senior high school with 1,678 students, and a junior college, with about 1,200 full-time and part-time students.

The building so designed that it becomes physically and psychologically a part of the total secondary-post high school organization, is unique in that flexibility is stressed throughout and its intimate relation to the comprehensive secondary education program is accentuated by a broad enclosed connecting bridge to Quincy High School. All this is to facilitate the interchange of students, staff, and equipment and to bridge the gap, too long left gaping, between the academic and the vocational realms in the education of older youth.

The building proper is uniquely designed in that the floors are "open loft" spaces and there are easily movable partitions and adaptable areas throughout the building. Bearing partitions are largely restricted to outer walls. The design provides for converting any area into shop, laboratory, or classroom with slight expense in alterations.

The vocational-technical unit planning provides for the most modern and up-to-date equipment in every department to assure all departments the necessary facilities for the future insofar as this can be envisioned.

The library is the center of the comprehensive-vocational-technical school plant and large enough to accommodate the entire student body's library requirements. Incorporated into the library area is the instructional materials center, which will include not only books but films; tapes; study carrels; models; and space for independent study, research, and experimentation.

Skills Development Center

The skills development center, which is also a part of the library plan, provides reference shelves and special training opportunities for needed learning for both the slow learners and the gifted. The center serves as a means of self-teaching to any and all students who may be helped by such learning processes.

There will be no suggestion of the center's serving as a means of helping those disadvantaged, handicapped, or retarded; rather it provides for all kinds of students who wish and need to have additional opportunities to advance their learning and mastery of content and skills.

No segregation will be allowed; no tracking or tagging of students according to their ability ratings is envisioned. Each student is accommodated in this imaginative learning center according to mutually agreed-upon need for special work and without any labeling of the student or program. There is no reference to handicapped or gifted, to low-or high-ranking students.

The approach is one of providing for upgrading or advanced study in academic or vocational areas according to the special concern of the student. This agreed-upon philosophy of instruction, counseling, and educational advisement applies to the school system and the entire teaching staff and is the outgrowth of deliberations, discussions, argument, and arrival at general consensus.

It is hoped that this approach will tend to deemphasize lectures and pure lesson-hearing and to ensure a great deal of student participation and individualized instruction, with students moving at their own rates of speed, particularly where much individual assistance by staff is indicated. The main task of the teacher becomes that of teaching the individual how to learn, assisting him over the difficult spots, and motivating and helping him to discover his own full potential and to work toward it. The plant is designed to facilitate the practice of this philosophy. The vocational director emphasizes that the educational program is designed, not to maintain standards, but to meet the educational needs of youths and young adults.

No student will be penalized by being denied opportunities, and no student will be allowed to get by through meeting stereotyped regulations that are geared to the so-called average mind or the mine-run of abilities.

Womens' occupations are receiving special attention. Girls aged 14 to 20 are offered foundation skills preparatory to further training in textiles, clothing, child care, prenursing, and care of the sick, and development units of work basic to health work, hospital work, food service, merchandising, home arts, medical technician service, business education, data processing, home economics, and other occupations related to these occupational families. Specialized training is provided in the post high school years. Under the law of the State of Massachusetts, girls are not permitted to be employed until they are past 18 years of age.

A remarkably fine arrangement has been agreed upon between the vocational-technical education director and the president of the junior college whereby the total facilities of the plant will be made available to the college student body and faculty through cooperative scheduling and planning to make much greater use of the vocational-technical plant. Since much of the junior college program is planned for afternoon and evening course offerings, there need be little conflict in scheduling. These and adult education courses will be discussed under post high school planning.

The educators who took the lead in designing what some who have studied it believe represents the widest break with tradition in plant design and curriculum planning in the history of vocational education were convinced that a new kind of building, curriculum, and relationship to high school and post high school education was essential to make the program broad enough, big enough, and dynamic enough to interest, excite, and challenge at least 60 percent of the student body to elect its offerings in their preparation for the world of work. Therefore, the planners and the architects (Caudill, Rowlett, and Scott of Houston, Texas) planned not for an outdated craft-type of vocational-technical education, but for education to cope with

the facts of modern large-scale production, with its specialization of labor. They designed a plant to provide basic skills training in a large number of occupations and to facilitate retraining and upgrading for specific jobs or new jobs. The emphasis has been on post high school vocational specialization.

Individualization

Through individualization of vocational and technical preparation and counseling, no one is to be placed in catch-all vocational classes because of poor preparation, immaturity, or lack of capacity. Students will be counseled to meet their needs, without regard to academic or vocational labels. Yet the planners of plant, scheduling, and curriculum faced up to the fact that automation poses the greatest threat to those with the least skills, the school dropouts, and to members of minority groups and low income families, and have assured these youths and adults every possible encouragement to complete their education. The new vocational-technical school planning provides an excellent demonstration of how a community can, through an educational system with wise guidance and counseling, become a major weapon in the war on poverty and unemployment by fully meeting the needs of disadvantaged youth, thus not only helping them to remain in the educational program and gain the opportunity of acquiring skills for job entry later, but giving them a fresh perspective on self-reliance and good citizenship.

In all this planning, revision, and modification of the educational system, the school authorities have succeeded in carrying the state and federal vocational authorities as well as labor leaders and management, eventually, along with their point of view. A breakthrough in the vocational pattern will serve as a basis for encouragement to other educators meeting resistance to change and should challenge the timid leadership sometimes found in positions of authority in school situations.

Summary: Vocational-Technical Curriculum Planning

The thinking and planning for a modernized program of vocational-technical education for Quincy, which is in process of being introduced as the new plant is added to present facilities, include these basic concepts:

1. With a view to meeting the interests and needs of all youth and community and national work-force requirements, vocational preparation must be available to all students as their interests are awakened or as the schools' holding power needs to be applied.

2. The staff accepts the point of view that there is as much educational value in vocational-technical subjects for many students as is to be found in the so-called abstract liberal arts-oriented type of secondary or junior college course offerings.

3. A strong work-oriented vocational-technical educational curriculum is planned for in the secondary school; an industrial arts type of exploratory curriculum may be found in the junior high school.

4. An important element in the planning has been the provision for incorporating in the curriculum liberal amounts of basic technology.

5. The facilities for collaboration on post secondary education planning ensure opportunities in technical training for junior college students as well as adults returning for retraining.

CHAPTER V

Post High School Education

Quincy is one of two school systems in Massachusetts to establish a collegiate program as a part of the school system. During the 8-years since its founding in 1958, enrollment in the program has grown to 1,200, including full-time and part-time students. The college, being a part of the school system and under the administration of the public school superintendent, has been most responsive and cooperative in the

broad educational improvement program and the planning for it. The average tuition rate is $380 per semester for full-time enrollees, or approximately $800 per year including textbooks and fees. This, of course, is expensive for a community junior college plan. If it converts to a regional state junior college it becomes eligible for substantial state support, which would enable it to cut the tuition rates. The school authorities recognize that tuition should be free to students who cannot pay the tuition and are excluded by the cost barrier; however, such a plan is not politically feasible at present in New England.

Despite the fact that the college was established primarily to provide liberal arts and general education for the high school graduate, its administrative leadership and faculty have worked closely with the superintendent of schools, the director of vocational education, and the committees concerned with vocational-technical education. The president of the college is also responsible for continuing education or adult education and works in close association with the director of vocational-technical education.

The plant is extremely limited because the enrollments and staff have expanded faster than the community's ability to provide additional plant and equipment.

Vocational and Technical - General Education

The evolution of the junior college represents growth from a small liberal arts institution preparing a few students for senior college to a comprehensive community junior college in which every individual who enrolls is free to pursue education to the full extent of his ability and competence. The administration's point of view is that a two-year community college provides an effective and economical means of extending the privileges of public education beyond high school for most of its graduates and also for dropouts through the continuing education division. There has come to be general acceptance of the two-year college as a multipurpose institution whose specific purposes and programs must be fashioned according to the demands of its constituents and at as low a cost to the student as possible. The tuition rates of Quincy Junior College are altogether too high for many who are enrolled or would like to enroll. State law should be modified to conform with the

best practice in California and other states where tuition for the two-year curriculum is free, or practically so, with the state bearing the brunt of the tuition charges. This practice goes back twenty or more years and has greatly accelerated post high school education in the states adopting it. The delineation between academic and occupational programs is deliberately blurred so as to avoid stultifying vocational-technical education classes. The counselors and advisers do not employ the primitive process of sorting out those qualified for college and those limited to vocational occupations. Instead, students are given full support in their efforts to determine their strengths and weaknesses, and courses and curriculums are tailored to meet the specific needs of individuals. At the same time, the faculty contends that general education is an essential element in occupational education; therefore, a small core of general education courses, depending upon the students' needs and plans, is recommended as part of the program of the future for the occupational world and successful living below the college degree level. This approach can modify the pressures on youth from the editorial writers, the school and college advisers, and the ambitious parents who have the obsession of wanting to send every high school graduate through a leberal arts degree program willy-nilly, which results in such dismal failures with thousands each academic year. This plan removes some of the pressure from the high school, where there is no longer the need for making fine distinctions between academic and vocational education. Students now move on into post high school education for further study, some for senior college and others for technical training in junior college.

The vocational-technical school and the junior college administrators are collaborating with a view to greatly expanding collegiate vocational-technical programs which provide occupational training and, where desired, lead to the degree of associate in applied science. This will assure an extensive post high school technical institute center for a broad spectrum of skills training.

The modern plant and equipment will serve a triple purpose in the community offerings for college work, continuing education (adult education), and secondary prevocational general and vocational course work.

Continuing Education (Adult Education)

The Quincy Junior College has served the adults of the community from its beginning in helping them upgrade their employment possibilities, prepare for new job opportunities, provide for self-fulfillment, and earn college credit. The number in these courses has grown to 766 this last year.

The evening program for adults includes such varied areas as special courses for employees of General Dynamics Corporation, courses for city police, and courses in data processing, reading improvement, foreign languages, supervisory management and many others.

Noncredit course offerings for those wishing to prepare for literacy tests or to makeup grade and high school course work also are a part of the adult education offerings; however, these offerings and the handcraft courses of 95 years ago (1871), when the first evening adult education was offered by the school system, have largely shifted to the vocational-technical and arts and crafts programs as illiteracy and immigration have declined. For example, in 1916, the schools for citizenship enrolled 676.

Today 1,460 adults are enrolled in a hundred courses in several general areas including trade school; evening classes for apprentices in various fields; and trade extension, technical electronics, preparatory electronics, instrumentation technology, civics, elective, high school, adult homemaking and handcraft classes.

Quincy is on the road to meeting the ideal in vocational and technical continuing educational programs proposed by President Johnson in his address before the American Association of School Administrators at Atlantic City, February 16, 1966, when he said, "Tomorrow's school will reach out to the places that enrich the human spirit;--- it will ally itself with the city, its busy streets and factories, its assembly lines

and laboratories - so that the world of work does not seem an alien place for the student. It will be the center of community life, for grown-ups as well as children."

CHAPTER VI

Upgrading Staff

Illustrative of the initiative taken by the Quincy faculty is the "Quincy Project in Educational Development" (Q-PED), which will become a part of a national in-service educational development (CO-PED) sponsored by select universities across the nation and working as a consortium funded by the U.S. Office of Education. The Quincy faculty is served by a team of consultants, including behavioral scientists, working out of the Human Relations Center at Boston University and Lesley College. The project is a 3-year program touching every member of the faculty. The plan includes seminars, workshops, and team consultations along with periodic evaluations of progress.

As proposed, the Quincy project, designed to establish a climate for change, is concerned with teacher behavior. The project assumes that no lasting, meaningful change can take place in public educatior until teacher behavior has been affected. It assumes that a teacher who is incapable of dealing with and responding to change is equally incapable of preparing young people to live in and contribute to a society characterized by continuous change.

The objectives of the project are few but significant:

1. To create higher horizons by establishing a climate for meaningful change.
2. To stimulate increased awareness and understanding of the nature of social and organizational change, thus meeting future educational needs.
3. To establish a procedure for cutting to the minimum the existing time lag between the development of new knowledge and its general acceptance in the public schools.

4. To make administrators and teacher-leaders more skillful in the dynamics of group behavior and the change process.

Association Activity

The Teachers Association at Quincy has to its credit a formidable array of projects in which it has engaged during the past year or so, including--

1. Holding a two-day instructional conference as part of a program on the fiftieth anniversary of the organization of the Quincy Teachers Association
2. Securing the adoption by the School Committee of a generous sabbatical leave policy for all teaching personnel
3. Establishing a public forum committee through which the Quincy Teachers Association annually sponsors a full year of educational radio programs on public issues and public affairs, including education
4. Coordinating a successful state aid to education conference on an intercity basis.
5. Cooperating with the superintendent of schools and the School Committee in securing the adoption of a professional procedures policy statement for the school system to guide professional relationships of the staff
6. Establishing a high school scholarship fund for deserving students
7. Establishing a policy of taking an active interest in promoting educational legislation and other worthy community activities.

The officers of the Association serve as the faculty advisory council to the superintendent.

The internal communication is excellent, and the mutual regard in which the faculty and administration hold each other provides a vehicle for effective working relationships, helps to discourage grapevine communications systems activity, and encourages an atmosphere of self-evaluation.

The freedom to raise "uncomfortable" questions without raising hackles tends to evoke honest and straightforward reactions and answers and sets the tone for a quality of professional teamwork which enables a high-grade educational institution to perform with a maximum degree of efficiency.

CHAPTER VII

Special Projects and Educational Improvement

An excellent criterion for measuring the vitality and the will for institutional self-renewal of a school system is the degree to which it locates and utilizes outside resources, grants, gifts, etc., with which to conduct experimentation, demonstration, research, and special projects in a search for ways to improve the quality of the educational program and to stimulate dynamic classroom practice.

Here is a listing of such projects started, under way, or completed in the Quincy school system during the pilot study period July 1964--September 1966:

Vocational Education Act of 1963 $975,610.00

1. Project ABLE

   Preparation of a program of study for the new Quincy Vocational-Technical School. In cooperation with the American Institutes for Research, the Quincy School Committee was awarded a $632,000 grant over a five-year period beginning in April 1965.

2. George Barden

   For the acquisition of materials for the Vocational-Technical School, Quincy has received $26,590. No matching funds required on new programs; 100 percent federal.

3. Vocational Work-Study Program

   For the support of a summer (1965 and 1966) vocational education work-study program, Quincy has received $19,650. A total of 35 young men have been included in the program. No matching funds required; 100 percent federal.

4. Business Education

For acquisition of multiple listening for teaching shorthand at North Quincy High School, Quincy has received $3,703.00. No matching funds required; 100 percent federal.

5. Business Education

For acquisition of equipment to establish a data processing program at Quincy High School, Quincy received $5,894.00. No matching funds required; 100 percent federal.

6. Construction of New Vocational-Technical School: $287,773.00

For construction of the new Vocational-Technical School, Quincy has, to date, received $287,773.00 in federal funds.

Federally Impacted Areas Act $542,940.00

For increased student enrollment and school costs as a result of a high concentration of families employed by the federal government, or working on federal government financed enterprises, Quincy has received $577,283.00. No matching funds required; 100 percent federal.

National Defense Education Act: $ 37,688.90

1. Title III--Critical Subjects

For acquisition of equipment and materials in reading, history, geography, and science, Quincy has received $28, 209.20. Funds are matching dollar for dollar. Quincy matched the federal share of $28,209.20.

2. Title V--Guidance

To strengthen the guidance program at the secondary level, Quincy received $9,497.70. No matching funds required; 100 percent federal.

Economic Opportunity Act of 1964 $230,896.10

1. Adult Basic Education

For a program in adult literacy, Quincy received $7,849.12. No matching required.

Economic Opportunity Act, 1964 (con't)

2. Head Start

For a program for economically deprived preschool children during the summers of 1965 and 1966, Quincy has received $30,000. No matching funds required; 100 percent federal.

3. Neighborhood Youth Corps

For a program to assist economically deprived teenagers in procuring and maintaining meaningful jobs, Quincy has received $243,046.98. Federal share, 90 percent; Quincy share, 10 percent in kind.

Elementary and Secondary Act of 1965 $106,742.92

1. Title I--Team Approach to the Diagnosis and Correction of Learning Problems

For a program aimed at expanding reading, guidance, and physical education services in order to correct learning problems of a selected number of educationally disadvantaged elementary school children, Quincy has received $29,832.17. No matching funds required.

2. Title I--A Comprehensive Program of Diagnosis, Guidance and Education for Handicapped Children in Special Classes

For this program, Quincy has received $6,961.75. No matching funds required.

3. Title I--Summer Education Institutes for Educationally Disadvantaged Youth

For this program, Quincy received $55,634.00. No matching funds required.

4. Title I--Summer Educational and Developmental Institutes for Educationally Disadvantaged Pre-School Children

For this program, Quincy has received $14,315.00. No matching funds required.

5. Title II--Library Materials

For the acquisition of library and other instructional materials, Quincy has received $29,430.00. No matching funds required.

Higher Education Act of 1965 $ 66,267.00

Junior College Work-Study

For a program to provide work opportunities for 60 Quincy Junior College students,

Quincy received a grant of $66,267.00.

Work stations will include kindergarten and classroom, library, laboratory, clerical, and athletic assistantships. Federal share is 90 percent of actual cost of salaries.

PRIVATE FOUNDATIONS

Paul Simons - Lt. Gutman Foundation of Temple Israel Brotherhood $2,500.00

In order to provide initial financing for project Q-PED, the Simons-Gutman Foundation awarded to the Quincy Teachers Association a grant of $2,500.00. No matching funds required; however, the Quincy Teachers Association, the Quincy School Committee, and CO-PED have shared in the cost of Q-PED.

Joint Council on Economic Education, New York, New York $3,500.00

For a program aimed at developing an economic education program for both elementary and secondary schools.

The New England Council on Economic Education has made available to the Quincy Public Schools the services of staff people and consultants in order to further the development of the economic education program.

SUMMARY OF FEDERAL ASSISTANCE

July 1964--July 1966

Vocational Education Act of 1963	$ 975,610.00
Federally Impacted Areas Act	577,283.00
Manpower Development Training Act	542,940.00
National Defense Education Act	37,688.90
Economic Opportunity Act of 1964	280,896.10
Elementary and Secondary Act of 1965	106,742.92
Higher Education Act of 1965	66,267.00
TOTAL	$2,587,427.92

SUMMARY OF FOUNDATION FUNDING

July 1964--July 1966

Simons - Gutman Foundation	$ 2,500.00
Joint Council on Economic Education	$ 3,500.00
TOTAL	$ 6,000.00

FINAL SUMMARY

Federal	$2,587,427.92
Private	$ 6,000.00
GRAND TOTAL	$2,593,427.92

There are other programs, of more limited scope, which are helping to revitalize the instructional process and encourage children and youth--and their families--who otherwise might be discouraged and become dropouts.

WOOD COUNTY (PARKERSBURG), WEST VIRGINIA

CHAPTER VIII

The Schools and Community of Wood County (Parkersburg), West Virginia

This city-county unit school system was selected for this study because of its uniqueness in the Applachian region and because of vigorous and forward-looking administrative leadership. Besides, the area was demonstrating unusual determination to overcome the traditional handicaps of "Appalachia" and to restructure its school system to meet the educational requirements of all its youth, especially the great majority, who are not college oriented.

Wood County, West Virginia, lies along the south bank of what is known as the "Mid-Valley" on the Ohio River behind the Appalachian and Blue Ridges. The city of Parkersburg was a settlement about one hundred years prior to the American Civil War. At its back door, in the Ohio, is located Blennerhasset Island, which figured in the exploits of Aaron Burr.

Beginning with the first school in 1767 which, according to tradition, was an integrated school with white and Indian children attending class at the "Point" the land at the confluence of the Little Kanawha and the Ohio--the present location of Parkersburg, there has been a struggle for survival. The wealthy Southerners of Virginia sent their children abroad and to private schools. For the others, education was haphazard at best. The construction of Jefferson's state failed to mandate a public school system.

In 1933, West Virginia went to a county unit system and the foundation of a state-supported public school system was born. Nevertheless, the property tax as a major source of support has kept school financing in constant need of attention. Under a constitutional limitation on raising school taxes, combined with low assessments of real property, the expenditures per pupil in the Wood County District were still far below the national average in 1963-64. In terms of expenditure per pupil for instruction, this district ranked thirty-seventh out of 53 districts in a state that ranked forty-fifth out of the 50 states in the nation.

The story of this Appalachian school system as one demonstrating what an emerging community is attempting to do to upgrade its educational establishment should prove an inspiration to any community, no matter how critical its financial resources.

Because of abundant supplies of water, natural gas, and oil, many thriving chemical industries have come to predominate in the economy. The glass industry has existed since early times. Farming is very marginal and occupies a very small percentage of the district's 80,000 residents.

School Organization

Wood County has an enrollment of 18,874 students, a faculty of 745, and a budget (1966) of $7,487,557 on an assessed valuation of $198,000,000. (Because of variation in assessing rates, the school systems are not comparable.)

There are 10,456 pupils in 42 elementary schools, 4,489 in grades 7 through 9, and 3,749 in two senior high schools (some of the ninth graders are in senior high school buildings). Four hundred students from Wood County are enrolled in the Parkersburg Branch of the state university. The system includes enrollees in Project Head Start through high school and postgraduate students.

There are no public kindergartens in the district.

The administration consists of the superintendent, three assistant superintendents, a director of public information, 37 principals, and 14 supervisors and special teachers.

Three years ago, upon the resignation of the superintendent, Dr. Grant Venn was appointed to the post. As an experienced administrator, he spent a good part of the first year getting acquainted with the staff, the community, and the educational needs of the school system. This report's description of the developments over a two-year period is illustrative of his leadership. He resigned recently to accept an associate commissionership in the U.S. Office of Education.

CHAPTER IX

Planning for Innovation

As explained earlier, the main objective of the study of and collaboration with the school systems was to furnish evidence that might be beneficial to other educational leaders, faculties, and boards of education in assessing their vocational-technical educational needs and curriculum changes; to assist them in identifying implicit opportunities for shifting to broader and more flexible concepts of vocational education; and to suggest means of adapting educational systems to current and future technological requirements. The Wood County system, because of its financial problems, is particularly valuable for study by boards of education and school administrations confronted with serious school financial problems.

Some of the specific steps and procedures employed to bring about innovation and adaptations to meet changing educational demands and new vocational-technical needs are discussed below.

There was the period of assessment, of problems, of discussions with principals and teachers and long meetings with the board of education over some of the new and persistent demands on the public schools. Of particularly great concern were secondary and postsecondary school education with special reference to those students who were dropping by the wayside or who were taking the college preparatory or general curriculum route and, often, finishing their school careers without essential skills to qualify in any technical or semitechnical mechanics for a few of the boys. Also there was real concern about the scanty offerings in adult education.

A very small percentage of the population was enrolled in adult education courses. (In the state the ratio was 1 in 107.) Seventy-three percent of the adults in the state did not finish high school. In fact, the 1960 census data indicated that in Wood County over 70 percent of the adults who were over 25 in 1960 had failed to graduate from high school. Eighteen hundred students were identified as qualifying

under the provisions of the Elementary and Secondary Education Act as eligible to receive special assistance. In other words, 10 percent of those enrolled in the schools came in the category of being in poverty as defined by the Act. Population studies showed that, as of 1960, there were 20,476 families in Wood County, of which 4,120 families had annual incomes of $3,000 or less. Only 7.9 percent were actually receiving public assistance, although approximately 20 percent were eligible.

The average education attained in the county was 9.8 grades. The military rejection rate was 42.5 percent. The total of school dropouts in 1960 was 46.4 percent; in 1964 it was estimated by the West Virginia Education Association to be 36 percent. There were 1,140 applications on the rolls of the Wood County School Placement Center for boys and girls looking for jobs (620 boys and 520 girls) as of November 24, 1964.

The school dropout rate was indicative of the school problem. The loss in dropouts from the Parkersburg Senior High School class of 1963 was 25.4 percent during the four years in high school.

Surveys of local industries indicated that few jobs were available for non high school graduates: Most well-paying entry jobs call for at least some skills in training beyond high school, with a fair degree of proficiency in the tools of learning--the language arts, arithmetic, and citizenship skills, along with human relations. On the other hand, skilled craftsmen and technicians had no difficulty in finding employment.

Utilizing the organizational machinery at hand and the solid foundation of planning by his predecessor and quietly fashioning additional instruments as the situation demanded, the superintendent and his staff began systematically to reexamine the role of public education today--the demands upon the schools and upon the young men and women who were leaving them through graduation or as dropouts. Principals and supervisors were encouraged to further explore these matters with their groups and to make suggestions on ways to deal with the changing demands of society, business, and industry. Some of the pertinent problems and questions brought to staff meetings

pointed up the fact that some teachers and staff were concerned about the need for reassessment, for updating and upgrading course offerings, and for bringing them more nearly in line with the current dramatic changes in most other phases of living. As discussions continued, problems were identified and committees were assigned to study and make recommendations. Meanwhile the superintendent brought to the board meetings the concerns of the staff, suggestions for steps that might be explored, and some candid appraisals of his own. He found the board and community ready for further improvement in the educational opportunities of Wood County system. All of these steps provided testimonials to the educational leadership which had conditioned the county school community for further educational growth.

The administrative advisory council, made up of the departmental administators; the principals; the Principal's Advisory Council; the PTA Council; and the Community Action Association all were involved in studies, planning, and appraisal of innovative proposals. The American Association of University Women gave strong support to the school improvement program.

Here was a school system bent upon self-renewal, the elimination of outmoded practices, and reorganization to meet the personal and work needs of the young people who were being graduated into a technological age the likes of which no previous generation had experienced.

In the process of planning for innovation, the superintendent demonstrated rare courage in filling a number of important staff vacancies with the most able talent that he and his associates could locate and the budget could command. This made the paths of progress much easier and, we might add, livelier, to travel. It was inevitable that things would move too rapidly for some in the organization, and there was the usual undercurrent of complaint. "We are moving too fast." "I don't know where we're going educationally." "All these radical proposals leave me wondering." Counter-balancing reactions came from scores of teachers and principals who were regaining their optimism.

Members of the Parent-Teacher Association, after attending some of the district council discussions, brought fresh and enthusiastic reports on some of the newer approaches under consideration.

The PTA requested a brief course in school finance by a knowledgeable central staff member. The League of Women Voters spent from its Treasury funds to publish a handbook of information on the public schools and their needs. The Board of Education was kept well informed, gave its endorsement to most of the proposals, and, while some members had reservations over the drama of educational reform under way, fully realized that the schools had been denied the resources to keep abreast of changing times and the new educational demands of the community, the nation, and the world.

Educational Problems

There were a number of "educational problems" which had been singled out--some of long standing and some of more recent origin due to changing educational requirements for the world of work.

Among the roadblocks encountered were these: constitutional tax limitations which prevented more adequate tax rates locally; failure of the state to provide a sufficient share of the educational budget; competition with other branches of government for the tax dollar; the practice of depositing school funds under a procedure by which the investment did not yield interest to the district; restrictive state controls that were archaic on matters of school finance and curriculum improvement; a school plant that was adequate for vocational-technical education in 1920 but very much outdated for today's occupational skills, training demands, and youth needs; a lack of enabling state legislation to allow local action toward providing postsecondary education; a fixed pattern of community higher education wholly unsuited to the needs of the area. High tuition rates and limited curriculum offerings by the state university branch precluded any possibility of the school system's establishing its own program of post high school education or community college.

For many educators, this array of headaches would have presented a course beset by too many hazards. To the superintendent and his staff it was an opportunity to demonstrate what can be done in the most difficult educational situations and was a challenge to leadership commensurate with the critical nature of the problems confronted. We might say it was leadership to match the mountains of Appalachia.

As planning moved forward, the school budget became a critical factor, with substantial annual increases. With a rather slowly rising assessed valuation and one of the lowest state-supported rates for public schools, the system found itself seriously handicapped in implementing innovations calling for added outlays. The administration regrouped its forces and proceeded to explore federal funds, which, by fortunate coincidence, were beginning to become available under the leadership of President Lyndon B. Johnson for those schools which had "tooled up" for educational change to meet the new demands of a society in the throes of a technological revolution. The school administration, sensing the slowness of the bureaucratic action in the government, simultaneously approached private foundations for assistance to a community striving to lift itself educationally by its bootstraps. It presented carefully designed proposals for grants to study or experiment with significant innovative kinds of educational practices and programs. Federal action on such matters as legislation to deal with the culturally disadvantaged and the unemployed youth who need part-time work to help them remain in school, and on programs to assist the schools in the acquisition of better facilities, improvement in personnel, and the eradication of poverty, and to provide funds for retraining the unemployed were seized upon by the school officials. Parkersburg became the first district in the state to submit qualifying proposals for federal grants under some of these laws newly enacted by the Congress.

The planning for change, for improved educational opportunities, and the search for government and private foundation help went forward while the community was conditioning itself for added educational obligations through bond issues, which

passed with very high margins in every instance. Salary scales were drastically improved and the first concrete evidence of success in upgrading education was beginning to appear.

The spirit of the community was caught up and expressed in the words of the superintendent in a Congressional hearing:[7] "There is one thing about which I am convinced [with reference to problems of education in Appalachia] and that is that every adult values, particularly for his children, but himself as well, the best education that he can get. These people, more than any I have known, are firmly committed to education for their children."

CHAPTER X

Education for Changing Manpower Needs

Before much progress could be realized in modifying the educational program to bring it more into harmony with changing manpower needs, it was obvious that faculty attitudes needed to be reexamined. Many in the schools had become dependent upon a set body of content in an outline based upon a matching text that, in at least some instances, had not been kept current. One of the real problems of educational leadership was to develop an in-service program that would serve as a vehicle for bringing about change regarding the curriculum, the course of study, and much of the instructional paraphernalia.

Multiple texts were encouraged. Fresh reference materials were introduced, and with supporting grants and allotments of funds from the federal government and foundations, a growing supply of new and creative instructional materials became available to classroom teachers. This had a salutary effect upon the efforts of staff and students. Creative teachers could add scope and depth to their work. Teachers who had lived with a paucity of instructional aids most of

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7. Grant Venn before General Subcommittee on Education of the Committee on Education and Labor, U.S. House of Representatives, March 16, 1966. Washington, D.C.

their professional years, as in thousands of school systems over the nation, suddenly found a rich environment for teaching, and students relished the new, richer environment for learning.

The school year was lengthened, and the teachers accordingly were paid additional salary. This gave additional time for in-service institutes to assist in upgrading the quality of teaching and to make possible the classroom teachers' sharing in planning and preparing for the use of new materials.

Staff members were sent to visit other schools; exchange teaching experiences with other school systems were arranged; special training programs for all counselors were funded through a Carnegie grant for summer study, conferences were held, and special committees worked on new programs and materials.

Through the U.S. Office of Education, assistance was provided to make possible in-service projects which included graduate level courses in the improvement of reading for all the staff members who volunteered to attend such courses, offered through television. Response was most gratifying.

Several surveys of need were made by the school staff, including "Innovation and Creativity in the Fundamental Learning Areas: A Proposal for the Establishment of a Multi-Purpose--Program Development and Curriculum Materials Center". This particular one was submitted as a proposal to the U.S. Office of Education and later received funding support covering not only Wood County but six adjoining counties which are now benefiting from the very broadened program of experimentation, research, and resource materials housed in the Center.

Meanwhile, the whole of the vocational-technical educational offerings came under the microscope of a special committee of staff in cooperation with business and industrial leadership in the community, looking toward an expanded program in this phase of secondary and postsecondary education.

Evidence of Need for Vocational and Technical Education

The dropout rate from the Parkersburg Senior Class of 1963, after completing

eighth grade (the attrition during the high school years), was 25.4 percent. The percent of attrition is approximately in line with the percentage of families classified in the culturally deprived or disadvantaged group. Many come from homes where high school graduation is not a tradition.

Studies made by the schools indicated that in 1964, of the 870 graduates, 275 (32 percent) enrolled for further study in college. Of this number, 40, or about 1 in 7, were enrolled at the Parkersburg Branch of the West Virginia University; 66 (8 percent) were seeking further training other than college; 529 (60 percent) were not planning further formal study or occupational training, at least when interviewed. This survey was very complete, reaching approximately 95 percent of all the class. When the 60 percent not planning further schooling after graduation are added to the 25 percent who quit before graduation, we get a figure which presents an appalling picture of undereducated human resources. These are persons who have had no technical training for work beyond twelfth grade. Again, the number of graduates who had taken a major in vocational education was 6.4 percent in 1963 and had risen to 10 percent in 1966 even though the new facilities and curriculum were still not fully implemented. This gives us the full picture of damage sustained by approximately 70 percent of the youth in the school system enrolling 18,000 students in its program. Between those who graduate from high school with no plans for further study, those who have taken no vocational or technical preparation for jobs, and the dropouts, more than three-fourths of all young men and women who advance through the public schools in Wood County System are shunted onto the job market and into the adult world of work unprepared educationally for employment above the rank of low skilled workers. We recognize, of course, that many youths will find their niche and get on-the-job training or will be drafted and may take advantage of military training while in service.

These statistics and the analysis by the staff of the output of what tradition and community pride have considered a fine high school program for the country's

youth provided the administration with the necessary evidence to challenge the board of education, the civic organizations, and all citizens who cared about the future of their young men and women.

The studies and discussions indicated that the college-oriented graduates are well prepared, in general, for continuing their formal schooling, and this group of 275 graduates was giving a good account of itself in colleges and in some of the best universities. It had to be admitted, however, that for that much larger group, for whom automation poses the greater threat--for those with the least or no salable skills, those who are destined to become society's dropouts, the group which often comes from a minority population--American schools generally have in large measure failed. In the past this was not the case. Today's technology has made it a fact. When viewed in this fashion, by failing to provide public education for effective living in today's world of work, our schools, and through them the community, are creating a built-in threat to our free institutions.

An Action Program

Under the leadership of the superintendent of schools, who had earlier studied this problem extensively, the faculty and the board of education found inspiration for action. He had observed that "Many of today's youths do not receive adequate occupational education, and attest to a series of shortcomings in the educational system...only one student in 10 leaving the educational system without a bachelor's degree has some specific occupational training." He asks, "What is happening to the 80% who do not get a college degree?" Then he adds, "Turned out of an educational system oriented towards someone else's college degree rather than their own needs, and entering a labor market whose jobs require consistently higher levels of education and skill development, these youths' prospects are bleak."[8]

8. Venn, Grant. Man, Education and Work. Washington, D.C.: American Council on Education, 1963.

Through conferences with the board of education, with the Advisory Committee, and with a competent administrative staff, the community was helped to recognize that occupational education in the broadest sense is not only desirable for a large segment of the secondary and community college population, but a sine qua non if the schools are to meet their full responsibilities to today's youth. The Wood County system boldly approached the challenge and the responsibility for taking action. On subsequent pages of this report, the courageous action of the board of education and the remarkable follow-through by the voting public attest to the high regard in which the school faculty and administration are held, but also to their understanding of the role vocational-technical education must play in a modern secondary and post high school curriculum. The way was being carefully prepared to bring to new elevation the technical training program that it was hoped would help to assure prestige values on a par with the college preparatory curriculum. It should be added that for many years the school system had been pioneering in vocational education.

At the very time these matters were under consideration, the Congress, under the driving force of the President, was enacting into law measures that would warm the hearts of school men and women and correct a grave social ill that has handicapped many deserving youths. Under the new legislation there was recognition of the fact that provision must be made for school attendance with part-time employment arranged for those youths needing to earn while they learn. The Economic Opportunity Act of 1964, the Amended Vocational Education Act of 1963, the NDEA (the Amended National Defense Educational Act) of 1964, and the Elementary-Secondary Act of 1963 all make failure now inexcusable for any youth who has the capacity for any form of skilled or semiskilled occupational training. The Wood County system seized upon every angle of these legislative acts to bring to the boys and girls of the County the full impact of assistance made available by the Congress and the President.

Wood County school authorities pride themselves on being among the first in

the state to make requests for government grants for disadvantaged youth and for vocational-technical education assistance. The budget support, as indicated later, was a magic weapon in bringing more local support for education as matching money in some of the projects. Although the schools had pioneered in aspects of vocational-technical education, the revolutionary changes of the 1960's called for revolutionary action.

Some Basic Steps Toward a More Comprehensive Education

The holding power of the schools was given a searching treatment by staff and faculty committees, teachers' building meetings, and statistical study. By degrees, the content fields--math, science, English, and others--are being examined to better meet individual differences. The concept of the school standard "which each youth must achieve to pass," is getting careful scrutiny. Gradually the broadened point of view has developed; namely, that a set of course offerings that challenged all students, with the expectation that students would excel according to capacity, represented the best that any school could offer. Less time is allowed for formal class performance; particularly significant is the reduction in amount of time taken by the teacher. More time is allowed for independent study activities with the teachers' assistance where required.

The procedures for evaluation of pupils have been modified. Scholarship marks and formal ratings of the students are deemphasized, while greater attention is given to helping the individual to find himself, become a participating member of the group, express his own ideas, and work at his own pace with the thought that every student should be stimulated to excel to his fullest capacity.

The dropout rate tells part of the story. The rate of leaving high school for all students has shifted as follows:

1962-63 the average annual rate of dropout for 2,995 high school students was 6.2.

1963-64 the average annual rate of dropout for 3,356 high school students was 4.8.

1964-65 the average annual rate of dropout for 3,530 high school students was 4.6.

1965-66 the average annual rate of dropout was approximately 5 percent, probably reflecting better holding power in grades 8 and 9.

A system-wide drive to help students to become more proficient in the basic learning skills was agreed upon. Fifteen teachers took special training by attending institutes at West Virginia University supported by National Defense Education Act funds. The supervisor-specialist was responsible for this work and for creating more interest and concern among all teachers in the skills of reading. A remedial reading center was established and well equipped.

The library became the focal point of attack in the effort to bring richer instructional resources at all grade levels. Neighborhood Youth Corps workers, after training, are being used as a processing team in the library. For the first time there are now centralized elementary school libraries with usable card catalogs and shelf lists.

In the high schools, instructional materials centers have been established. Through the appointment of a system-wide committee, a course of study in library skills is now being taught, beginning with first grade. A media center has been established at the administration building, where the school library system is served and expanded. The libraries in high schools have been opened for evening use, and the time is being extended to Saturday hours to help students in their reference work. A substantial allotment of unused NDEA funds in the state has made possible the transformation of the library at the secondary level into a first-class facility.

Field trips are now possible through special busses designed for carrying students and teachers in class groups to museums, industries, and other schools on geological, botanical, or historical field missions. These additions to the school bus fleet have become possible through recent state legislation. The additions for field trips are made possible through the purchase of these cultural opportunities for some students and curriculum enrichment for all.

"Project Opportunity--A Discovery Approach" was the result of a direct agreement with Encyclopedia Britannica Films to bring a dynamic and experimental-minded school system into its study of visual aids as a means of teaching. This unique program, with the help of National Defense Education Act support, provides $225,000 worth of

films to the classrooms of all grades in the Parkersburg-Wood County School System. The material, which includes films, filmstrips, record albums, and transparencies, is providing teachers and students alike with a real educational experience as they explore and develop new concepts and methods of instruction in making use of the vast store of visual aid materials now stocked in the Instructional Media Center at the Administration Headquarters.

PACE (Projects to Advance Creativity in Education) is an expansion to a seven-county area of the concept embodied in Project Opportunity. It consists of an education center and consultant service in a new plant on the ground adjacent to the administration building, housing instructional materials and office and administration facilities for the six counties adjacent to Wood County, including the nonpublic schools in these counties. The project, under the leadership of the Parkersburg-Wood County School Administration, was funded under Title III of the Elementary-Secondary Education Act. It is under the direction of a board composed of the superintendents of the counties represented. The Britannica films will also be made available to PACE. Additional consulting specialists are serving the entire area. The projects have as a major objective not only enrichment of classroom instruction but especially providing the necessary resources to encourage the potential dropout and the disadvantaged to continue in school to the point of working through to high school graduation. The statistics give no room for doubting that this is succeeding.

Making Counseling and Guidance More Effective

Prior to 1963, four certified school counselors served a secondary population of 8,000 students. This was a ratio of approximately 1 to 2,000. Funds to expand were lacking. The school administration searched for resources to attack this problem as basic to the total manpower training-dropout situation.

A grant of $100,000 was received from the Carnegie Corporation to establish a Job Placement Center in the school system to serve all the youths in the county

between the ages of 16 and 22. It also made possible two summers of counseling each year. By the second year, virtually all students and parents had taken advantage of the opportunity to confer. The project also provided for summer institutes which a corps of counselors were designated to attend. This group of counselors represented a 400 percent increase in the secondary education counseling staff over that of the past. In addition, funds were made available for a pilot project in elementary education. This latter step was tied in with Project Head Start and the effort to alert teachers in the elementary schools to the possibility of identifying potential dropouts before they reach secondary school, where it is often too late to save their school careers from termination. Among the special activities to upgrade the advisement services to children, youth, and parents, these additional programs are under way under the leadership of the newly created post of director of counseling:

1. All the counselors are keeping daily logs of activities, which are summarized and pooled monthly with a view to unifying practice and procedures; the department collectively analyzes these returns.
2. A follow-up study has been made of students, including graduates who have been out of school two years. The IQ records of these students are being studied in relation to their present status, kind of work, adjustment to life, etc.
3. A counselor's handbook has been developed that places at his fingertips not only course information but many other facts helpful in answering student and parent inquiries concerning course selections and programming.
4. Trips are taken to industrial plants and business establishments by counselor teams to study job opportunities, become acquainted with the personnel staff and with the problems which the students will face, and get suggestions from the personnel directors.
5. Expansion of the elementary counseling program is under way.

6. Staffing has been arranged for a noon-hour career conference discussion for interested students two days weekly, with invited consultants from the service clubs participating.

These programs would have been absolutely out of the question were it not for Carnegie; Encyclopedia Britannica; and NDEA, EOA, Elementary-Secondary Education Act resources, and other federal legislation, which have so effectively supported the community's educational officers in improving quality while increasing the school's holding power. An additional by-product has been the slowing down of the Appalachian brain drain to adjoining states among educators.

CHAPTER XI

Providing for Vocational-Technical Education

In planning to expand and upgrade the vocational part of the secondary school offerings, the administration at Parkersburg was faced with a series of critical decisions on matters of program, content, housing, transportation, and community interest, to say nothing of the traditional subject matter-content rivalries. With all the vocational work centered on the main high school campus in this city, with need for expanded high school facilities on the south side, and with a small high school in suburban Williamstown, it was finally agreed that most of the vocational program should be divided between the two largest high schools. This was made easier by virtue of the facts that most students are transported presently and that with a shuttle plan students could move between schools rather promptly for vocational work. This would make it easier for students to elect vocational courses regardless of which building they normally attend.

In studying the possible adaptations of the total plan to meet new curriculum developments that would broaden the school's holding power and expand and improve the vocational-technical curriculum offerings, it was decided by the joint committee on vocational-technical school planning to keep the Parkersburg High School vocational facilities intact and add to them. It was contended that 4,500 high school students could be served by the total vocational plan divided between the two schools;

duplication of services could be eliminated by a bus shuttle service between schools. This would make possible a more versatile curriculum with a much wider range of choices.

These arrangements were recognized as also helping to erase the dividing lines between liberal studies (college preparatory) and vocational-technical programs. It would support the philosophical concept of a unified curriculum for both comprehensive high schools.

The Franklin Junior High School, originally built to become a high school, was now to be converted to the Parkersburg South High School and expanded to accommodate more vocational-technical courses near a growing section of the city's senior high school population. A new junior high school has been built for the students vacating this building. In the distribution of the new program between schools, it was believed that the concept of the comprehensive secondary school could be better preserved and that the division between vocational-technical studies and liberal studies, so difficult to eradicate or contain, might thereby be more successfully dealt with.

A part of the planning also contemplated deferring to post high school and to the West Virginia University Branch at Parkersburg a major role in technical education.

The ideal solution would have been the establishment of a community college by the Board of Education, made free, or at least on a low tuition basis, for students from the district and the neighboring counties, like the West Virginia University campus. Two roadblocks existed. First, the school budget limitation made such an expansion impossible, and the state has no subsidy for community colleges; second, existence of the state university branch established four years earlier made such a move, even with district resources, unwise. Yet the tuition rates were three times higher for those attending the local branch than for those at the Morgantown campus. State funds could not, by law, be used for branches. Nevertheless, the school officials and the planning committee took the position that

technical education should be primarily a community college level program and that the community and state could be brought to accept and support this principle. The results of this approach are detailed in the next chapter.

Curriculum Planning (Vocational-Technical)

The special staff committee assigned to work with the community leaders, the Building Trades Council, and the industrial personnel people and to confer with authorities over the nation on the best available thinking about modern curriculums for vocational-technical education in a comprehensive high school carried on its work and formulated a set of documents embodying its findings, including points of view or philosophies of various authorities, a stated set of guiding principles, a statement of purposes, and proposed programs to be incorporated.

The essence of these research summaries is as follows:

Principles

1. Avoid curriculum organization and pupil programming procedures which force a choice between vocational and academic routings.
2. Arrange course programming so that students are free to choose optionally from both areas.
3. So plan that all pupils have the advantage of seeking entry job employment.
4. Allow all students the option of developing considerable skill which would hasten job entry should they need it as they continue further studies.
5. Offer course selections which provide foundations for further training.
6. Facilitate acquisition of knowledge and skill requisite to beginning experience in technical employment.
7. Plan shops and laboratories around major families of occupations.
8. Make trade-industrial exploratory offerings as low as ninth grade where helpful in extending the holding power of the schools.
9. Plan instructional arrangements to ensure a combination shop-classroom.

10. Avoid complicating scheduling and individual programming in trade-industrial offerings by eliminating extensive half-day blocks of a student's time in his program.

Purposes

1. Provide equality of opportunity in high school for the educable, and for those few who are largely trainable only, to prepare themselves for the next steps, including entry jobs or other post high school training.
2. Greatly reduce the number of young people who leave school without workable plans for the next steps.
3. Provide equality of opportunity in high school for educable young people to receive high quality academic instruction by qualified teachers.
4. To assure this, provide an academic curriculum with a vertical range from basic or corrective to advanced placement courses in content fields, with provision for reassignment at any time the level of achievement indicates such need.

The superintendent of schools, Grant Venn, delineated these concepts very clearly in his research study on postsecondary vocational-technical education[10] when he said:

> The need to combat the dropout problem, the lack of work skills manifested by thousands of adults, and the need for general education for all occupations combine to underscore the high school's important role in today's technological society.
>
> Programs preparing youth to continue vocational and technical education after high school education should be of the same quality and availability as the college-preparatory curricula now available.
>
> It is increasingly apparent that occupational education is dependent upon general education; these two aspects of an individual's education should not be separated. High schools should establish vocational educational programs which offer all youths, leaving high school, marketable occupational skills or preparation for further occupational education.

The committees for vocational-technical educational planning and the general education people arrived at a point of view which can be summarized in the words

10. Venn, Grant. Man, Education and Work. Washington, D.C.: American Council on Education, 1964.

of Lloyd P. Williams:

> The liberal and vocational disciplines need one another. Life requires them both; an adequate personality demands them both. The vocational aspect of education and of life needs enrichment; it needs to be brought under the scrutiny of critical intelligence; it needs the illumination that comes with comparison; it needs the clear delineation provided by historical perspective; it needs the invigoration that comes from close involvement with the liberal disciplines. By the same logic, the liberal disciplines need focus; they need to be pointed in some useful direction; they need association with the practical to overcome their abstract remoteness; they need to be tempered by the world of human problems; they need the enrichment that comes from close involvement with functional studies. The point may be generalized this way; each reinforces the other. When the liberal arts set the limits to the vocational arts, the latter are humanely and wisely channeled; when the vocational arts provide a practical reference line for the liberal arts, the latter are relevantly infused through life. Each can be fulfilled only in association with the other.[11]

Vocational Offerings

The areas of vocational-technical training in the secondary level were agreed upon as follows (this listing contains the old and the new):

1. The building trades cluster
2. The maintenance cluster
3. Power mechanics and repair and maintenance
4. Electricity
5. Drafting
6. Graphic arts
7. Fabrics cluster
8. Foods science cluster
9. Business education
10. Technical cluster
    - Data processing
    - Electronics
    - Civil technology
    - Chemical technology
    - Prenursing
    - Prebeautician's work
    - Agriculture and related training

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11. Williams, Lloyd P. "The Struggle for Balance--Vocational Education in the Western World." Unpublished address. Professor Williams is on the Education Faculty of the University of Oklahoma.

Vocational Counseling and Placement

A major portion of the "new look" and appeal in the vocational-technical offerings is, in part, accounted for by the Carnegie Corporation grant of $100,000 previously mentioned, to revamp the counseling program and to establish placement offices for students ages 16 through 22, whether in school or not.

As described earlier, this has provided an excellent in-service training program for teachers. Quite as important have been the parent-student consultations in the summer months intended to help parents and youth understand better both vocational and educational opportunities and the school's assessment of the student and his potential.

A follow-up survey of all graduates is now conducted after one year out of high school. These data have been invaluable in studying educational offerings in relation to vocational and general educational needs of pupils. The placement office operated as a pilot project for Appalachia assists in identifying students in and out of school, who are without jobs, gets to them with the proper counseling, and often assists in finding part-time or full-time work for them. Between the new counseling program, enriched vocational course offerings, and part-time work provided by the Youth Corps and Work Study Projects, students are finding fewer excuses for leaving school. Under Title IV of the Elementary and Secondary Education Act of 1965, a special dropout study is under way, with emphasis on getting all dropouts back in school or on a job.

The problems of youth employment are highlighted in the figures of the placement office. Forty-five percent of the students seeking full-time jobs and about 85 percent of those wanting part-time work have been placed. This is further improved with the growth of the Neighborhood Youth Corps and other work-study programs.

Utilizing Support Programs

The broad types of support which have become available to all types of school

communities in helping meet educational needs and the growing interest and concern of the nation's lawmakers in the education of our children and youth have come at the very time when Wood County School System was struggling to raise its educational standards and search for additional financial resources. As a consequence of the legislation over the past three years, the school board and administration have found assistance through several Congressional acts previously mentioned, in part covering these areas of the school program:

1. Modernization and enlargement of the vocational-technical education programs and facilities
2. Support through work-study programs
3. Education of the disadvantaged and the handicapped
4. Retraining, learning basic skills, and literacy programs
5. Educational planning to challenge the dropouts
6. Postsecondary education plans and programs
7. Counseling-educational and vocational
8. Improvement in libraries--elementary and secondary
9. Adult education--lifelong learning
10. Instructional equipment and supplies
11. Experimentation in vocational education
12. Employment of teachers' aides
13. Training, retraining, and in-service education of teachers.

The breadth of federal support, along with substantial assistance from private foundations and individuals, has placed this school system in the lead, not only in meeting manpower needs, but more importantly in helping all youth achieve more nearly their educational potential. This has carried over into post high school educational interests and community developments in ways that three years earlier had every appearance of being absolutely impossible. This is described in the following chapter.

CHAPTER XII

Post High School Education

The College Attendance Dilemma

Three years ago, the county unit school system was graduating and sending on to college fewer than 1 in 5 students completing the eighth grade, with about 5 percent finishing the vocational-technical program. Of the noncollege bound group, fewer than 1 percent were seeking any form of further training after high school. The dropout rate represented 1 in 4 who never completed the twelfth grade after finishing the eighth grade.

The reasons for a low post high school education record were obvious:

1. The high school curriculum had continued to emphasize college preparatory work.
2. Vocational-technical education had remained somewhat of a stepchild.
3. Few students had a tradition of college attendance in their family background.
4. The resources to attend college were largely lacking for far too many.
5. The district was somewhat distant from higher education institutions for commuting purposes.
6. The State University Branch at Parkersburg, because of unique tuition requirements, virtually excluded many students from low income families. State law required branches to be self-supporting.

The situation which the new superintendent of schools and the board of education faced in 1964 in exploring ways to extend post high school education was indeed critical.

The West Virginia University Branch of Parkersburg was established in 1961 after much reluctance by the political and collegiate forces in the state. The legislature had made it impossible to establish public community colleges and had limited the development of branches of the University by making tuition the sole support for the branch. The Parkersburg Branch, supposedly serving eight counties, had a tuition rate of $750

or three times the tuition rate on the home campus of the University of West Virginia at Morgantown. Also, only candidates who qualified for a four-year degree program could enroll.

This made an intolerable situation for educational planning beyond high school in the local school system. To compound matters, the local district was not in a position to maintain a community college without state or federal assistance, although it did supply the building, utilities, operation, and maintenance costs.

The University Branch was not serving the technical education needs of its enrollees and was attracting few liberal arts majors because of the tuition rate, admission restrictions, and limited program.

The Search for Solutions

With a University Branch in the community which was not geared to meet the educational needs of the great mass of students who would profit from terminal technical course offerings, and with many students in need of financial assistance or reduced tuition costs, the community and school, working through the Parkersburg Branch Fund Committee, began planning to ask the legislature to amend the governing legislation to correct the situation. This effort is now under way.

The Citizens Committee has held conferences with the president of the state university, the board of trustees, and the governor to fully acquaint them with the above problems and the area's needs and are very hopeful of support in getting modifying legislation.

As further evidence of the united community support for the revitalized Branch University, the county passed a building bond election for $1.2 million with a stunning majority of 73 percent. The community has also secured $1,141,000 from the Higher Education Facilities Act. The Appalachian Regional Commission has assured a grant of $682,000. The generous action of the County Commissioner in deeding to the Branch 176 acres valued at $400,000 for a new campus site further indicates what can happen when a community becomes inspired with the vision of the educational needs of its youth.

These community efforts have produced a campus and plant which, when the present phase is completed, will be worth $3.5 million. Students responded with comparable enthusiasm. The usual check on students planning to go on for further study after Parkersburg High School graduation showed a jump of over 60 percent in one year. This, it must be conceded, was the result of several important changes in the school system, including the new counseling plan and job placement program, the emphasis on vocational-technical education, and an increased emphasis on the in-service education program for the faculty. But with the prospect of a direct dollar cost reduction in tuition, the student response has vindicated those leaders who contended for more college education for the community.

A New Curriculum Approach

After discussions between the Parkersburg Branch staff and the public school staff, certain fundamental changes were agreed upon with reference to the purpose and function of a Regional Branch of the State University and the responsibilities of the school system in the area of vocational-technical education. Also the underlying philosophy of education was examined by the two groups with a view to attempting to reach certain fundamental agreements on the aims and purposes of education for all the youth and adults in the community who might wish to continue their education beyond the secondary school or to return for more education after having dropped out before completing the secondary school.

There was general agreement that duplication and overlaps in course offerings should be eliminated. Together the groups identified some 19 areas for technical programs to be offered in the college; these were to be coordinated with the high school pretechnical course offerings to eliminate competition and make much of the high school program introductory to technical higher education offerings.

There was agreement to move heavily in the direction of counseling and guidance at the junior college level and to tie in with the work of the high school counseling staff. It was agreed that it was the responsibility of the Parkersburg personnel, using technical assistance from the Morgantown campus, to undertake curriculum design. The academic

or degree standards are to be those of the University at Morgantown. The state department of education was brought into the planning in order to help the state vocational officers become acquainted with the educational developments.

This community-oriented college, now coming to be known as the "Parkersburg Center," includes four main program areas:

1. A two-year college program for students expecting to transfer to a senior college after completion of the two-year course
2. A two-year terminal technical education program that will enable students to prepare for jobs in an increasingly complex society
3. An area of community service and community problem solving. In this area, both credit and noncredit adult education will be available on an open-ended basis. An assumption is that education is a never-ending process and that the center is for people to enrich their lives and advance their careers or retain or acquire new ideas and knowledge.
4. Through a cultural program, a wide array of cultural activities within the community for all who wish to share.

Within the framework of these four main areas of educational activity, other programs will be fitted into the college schedule. A developmental program will accept dropouts in a special "opportunity school" plan after they reach the age of 18. They can take special courses according to needs and interests. The courses are noncredit for those who need some specialized training to upgrade their educational attainment in order to qualify for further training. It is hoped that this training will develop them to the level that they can pass the GED test offered by the state board of education.

Cooperative plans have been made with the industries in the region to share in training, advising, and accepting for employment many who complete the technical course work.

The college is to be a diagnostic center to which the youth of the eight-county area may come for psychological, psychiatric, or vocational service counseling. Vo-

cational counseling includes helping the student who shows interest and need how to connect with resources to assist him in continuing his education. With the current federal interest and assistance, almost any serious-minded student can earn his way through the Center college program in liberal studies preparatory to further college work to complete a technical education and qualify for one or several kinds of technical jobs.

The combining of the resources of West Virginia University and the community public education system gives an excellent example of how a region can overcome almost hopeless odds in meeting the educational needs of its youth. By using the political and educational leadership of the area, it was possible to marshal the state's backing and the federal sharing in redesigning local educational facilities to better meet the critical demands of a great majority of the youth. That these forces should have been able to merge at a time when the whole American culture demands educated technicians for nearly all walks of life is fortunate in the extreme. Many individuals may thus not only avoid the relief rolls of tomorrow but lead lives of greater happiness and fulfillment than they could otherwise have known.

The educational planning by the local and state authorities has been guided by a fresh and encouraging approach to curriculum planning beyond high school, especially in terms of manpower development and of dealing with the overriding threat of job insecurity in the next decade, when 15 million new workers will invade the job market.

One of the distinctive innovations in the Wood County program has been the change of pace in the postsecondary school program concerned with efforts at educational planning to cope with the area's manpower needs and the ambitions and hopes of the noncollege bound youth.

Today the numbers planning for continuing education, including those who no longer drop out after the eighth grade, have practically doubled. Of even greater significance is the educational planning all along the line which has given new substance and purpose to going to school and college--to the point that more students personally sense the profound concept of education as "lifelong learning."

CHAPTER XIII

Upgrading of Staff

John Gardner, Secretary of Health, Education, and Welfare, has given a list of rules for organizational renewal.[12]

The first rule is that the organization must have an effective program for recruitment and development of talent.

The second rule for the organization capable of continuous renewal is that it must be a hospitable environment for the individual.

The third rule is that the organization must have built-in provisions for self-criticism. It must have an atmosphere in which uncomfortable questions can be asked.

The Wood County School System, to a remarkable degree, has built into the administrative organization supervisory machinery and professional relationships, the essence of Secretary Gardner's first three rules.

The administration is responsible for the recruitment of the best talents that the salary scale and school community can attract without any reservations. Faculty co-operation is solicited in filling vacancies. Provincialism and regionalism are not permitted to restrict the search for quality personnel.

The working relationships, personnel policies, and democratic atmosphere set by the superintendents are such that individuals are respected, positive human relations are cultivated, and esprit de corps is carefully protected in the interest of creating a continuous hospitable environment for growth and a search for better ways of doing things.

The superintendent-Teachers Association relations are cordial, permissive, and stable. There are teacher-administrator policy planning committees and committees on working conditions and professional relationships. Much of the curriculum improvement and building planning is shared with these committees.

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12. Gardner, John W. "How To Prevent Organizational Dry Rot." Harper's Magazine 231: 20; October 1965.

nnovation

The administrative and supervisory staff worked to develop in-service activities hich would result in the studying and reappraisal of the curriculum, course of study, methodology, and resources of the school. Gradually, the leadership encouraged replacement of the outdated curriculum guides, which were largely outlines based upon one or wo texts for the course, with fresh and much richer teaching materials. At long last, the classroom teacher discovered that there were funds for new materials, made available hrough federal grants and matching funds. The superintendent and staff sought private foundation support, and there followed films, projectors, recordings, library materials, aps, charts, globes, reference shelves, and substantive magazines and newspapers of pth liberal and conservative points of view. For the first time, the New York Times and the Washington Post were available in daily editions at the high school libraries. th Carnegie Foundation and Encyclopedia Britannica Fund resources, and with the help of local benefactors and special grants from the U.S. Office of Education and through ther federal laws, classroom teachers were flooded with a lush supply of instructional ds never known before.

This approach gave marked emphasis to the work of a host of faculty committees rking on areas of the curriculum and instructional problems. Remedial reading received special attention, with emphasis on improving the quality of teaching reading. tudies of marking, promotion, retention, and rigid standards were initiated. Actually, n the school's administrative policy handbook (now discarded), it was spelled out very clearly that the junior high school program was to serve as a screening device to liminate those not capable of learning at the high school level. It was suggested that 25 percent of those leaving the seventh grade should be eliminated before leaving he ninth grade. Where should they go? The guide was silent on this point.

Today system-wide curriculum committees in grades 1-12 are continuously working on the "purpose of evaluation," studying and planning curricular improvements. Other mmittees, composed of classroom teachers and principals, are working in the areas of

science, mathematics, language arts, social studies, and vocational-technical education.

Team teaching has been introduced. Experimental work is being started in ungraded primaries. Pupil reporting techniques have undergone much revision. Approximately one-third of the teaching staff are currently taking, at board expense, graduate level course work by way of television in order to improve their professional skill. In all these activities, faculty participation in designing the projects and programs has been emphasized.

The Wood County Educator, the house organ for the faculty and other employees, carries the message to teachers of new plans, ideas, and inspiration generated by the staff, teacher committees, and board of education. It is financed by the Wood County (Teachers) Education Association.

The professional library and Curriculum Materials Center have received special attention as resources for teachers and committees.

The Wood County School Instructional Media Center and the Seven County Area Project PACE (Projects to Advance Creativity in Education) were developed under administrative leadership. Funds from foundations and the USOE (U.S. Office of Education) were secured to employ staff, erect a small center, and service teacher committees with materials and demonstration teaching. The effect of the Wood County schools' work in revolutionizing education to meet new needs of children and youth has had a distinct impact not only upon the seven-county area in PACE or upon the eight-county area covered by the Parkersburg Branch of West Virginia University, but also upon educational legislation and practices throughout West Virginia.

In the process of improving faculty, the administrative staff was not overlooked. The superintendent arranged for a group of his colleagues in the administration to attend the Bethel, Maine, School Administrators Laboratory at a cost of $2,100, which was made available by gifts from private citizens in the community.

CHAPTER XIV

Special Projects and Educational Improvement

An excellent criterion for measuring the vitality and the will for institutional self-renewal of a school system is its effort to locate and utilize outside resources, grants, gifts, etc., with which to conduct experimentation, demonstration, research, and special projects in a search for ways to improve the quality of the educational program and to stimulate dynamic classroom practice.

Here is a listing of such projects started, under way, or completed in the Wood County School System during the pilot study period July 1964--September 1966:

Vocational Education Act of 1963 — $395,643.00

1. Regular vocational programs; day and evening classes at Parkersburg High School in vocational agriculture, business education, home economics, and distributive education.

   Reimbursement to school district toward teaching salaries, $246,494.00 prorated matching, according to state plan.

2. Toward construction and equipping vocational division of new Parkersburg South High School, $417,800.00

   50 percent matching required.

3. Title III; vocational and technical electronics courses, $31,234.00

   50 percent matching required.

4. Work Study Program; to assist qualified economically deprived high school students to remain in school, $1,350.00

   100 percent federal--no matching required.

5. For a program in adult literacy, $10,408.00

   100 percent federal--no matching required.

Manpower Development Training Act — $311,643.00

1. For retraining of unemployed and underemployed adults. Training program has been carried on in data processing, machine bookkeeping, stenography,

air conditioning and refrigeration mechanics, diesel mechanics, and office machine repairing.

100 percent federal--no matching required.

National Defense Education Act $329,249.00

1. Title III--Critical Subjects III

For acquisition of materials and equipment used as basic and as enrichment of supplements to school district curriculum, $305,097.00

50 percent federal--50 percent local matching.

2. Title V--Guidance

For strengthening guidance program at secondary level, $24,152.00

School district prorated share in accordance with State Plan.

Economic Opportunity Act of 1964 $671,469.00

1. Head Start

A program for economically deprived preschool children during 1965 and 1966. The school district was allocated federal funds, $81,423.00

90 percent federal--10 percent local in-kind required.

2. Neighborhood Youth Corps

A program to assist economically deprived teen-agers to procure and maintain meaningful jobs. School district allocated federal funds, $423,580.00

90 percent federal, 10 percent in-kind required.

3. Remedial Reading Program

A program to assist economically deprived, underachieving students to reach their full learning potentialities. Federal allocation, $166,466.00

90 percent federal, 10 percent local matching in-kind required.

Elementary and Secondary Act 1965 $470,526.00

1. Title I:

Program for remedial extended day program for disadvantaged youth, teacher aide and health services, $176,014.00

Project 2--Remedial enrichment summer school and outdoor educational project, $85,823.00

100 percent federal--no matching required.

2. Title II, Library Materials

For acquisition of library and other instructional materials, all schools in district participating, $35,214.00

100 percent federal--no matching required

3. Title III

For instructional materials and program development center to serve seven-county region, including film library, teacher library, and eight professional consultants, $173,475.00

100 percent federal--no matching required.

Higher Education Act 1965 — $1,144,956.00

1. To provide equipment and books for West Virginia University Branch, Parkersburg, West Virginia, $3,498.00

   100 percent federal--no matching required.

2. To provide new construction for the West Virginia University Branch, Parkersburg, West Virginia, $1,141,458.00

   To be matched, 50 percent local--50 percent federal.

PRIVATE FOUNDATIONS

Carnegie Foundation — $200,000.00

A program to discuss the educational and vocational future of each high school pupil in the county school district.

Mrs. T. L. Harris, a private individual — $ 25,500.00

To purchase approximately 350 acres, including a nine-hole golf course and a recreation building. This will be used for employees' recreation and also as a student learning center.

SUMMARY OF FEDERAL ASSISTANCE

July 1964--July 1966

Vocational Education Act of 1963	$ 707,286.00
Manpower Development Training Act	311,464.00
National Defense Educational Act	329,249.00
Economic Opportunity Act of 1964	671,469.00
Elementary and Secondary Act of 1965	470,526.00
Higher Education Act of 1965	1,144,956.00
Total	$3,634,950.00

SUMMARY OF FOUNDATION FUNDING

July 1964--July 1966

(Also private grants)

Carnegie Foundation	$ 200,000.00
Mrs. T. L. Harris	25,500.00
Total	$ 225,500.00

Final Summary

Federal	$3,634,950.00
Private	225,500.00
GRAND TOTAL	$3,860,450.00

There are other programs of more limited scope which are helping to revitalize the instructional process and encourage children and youth--and their families--who otherwise might be discouraged and become dropouts.

SUMMARY AND CONCLUSIONS

Evaluation and Recommendations

In inaugurating the project, the staff set out to pick school communities with which to be involved that were demonstrating uniqueness, imagination, and courage in their educational planning and that had administrative leaders who were willing to experiment and were not tied by loyalties to the status quo.

We sought evidences of a spirit of growth, innovation, and renewal within the school system and of a disposition also on the part of the school board to cooperate in a developmental program. We worked to find evidence of innovation in educational practice that might be profitably communicated to other school systems, boards, and faculties facing comparable problems.

We deliberately planned to limit the study to those elements of the school system relevant to meeting the changing educational needs of youth and the nation's manpower requirements, with special attention to vocational-technical education.

We chose to exclude affluent school systems from consideration, as well as many aspects of education important to a good program but not relevant to the study. We limited our efforts to those elements directly related to our objective, education for manpower training and development with particular attention to the students dropping out of school or not going on for further training beyond high school.

Achievement of Objectives

1. Both communities systematically went about preparing their staffs, facilities, school boards, and citizens for study and improvement of the educational program to meet the changing vocational needs of their youth and adults.

2. The school officials initiated studies within the faculty while soliciting help from the outside as the staff attempted to identify shortcomings and needs and to diagnose the problems encountered. There were no attempts to cover up or evade the issues as they were brought into the limelight. Such thorough and pervasive study and research

provided a solid base for school board support, faculty cooperation, and community endorsement of the major elements of the program as they were presented; these involved the building program and necessary bond issues, the consistent increases in operating budgets, expansion of staff, additions of services, and overhaul of curriculum content and methodology.

3. Educational philosophy and practice were examined with a view to their being modified through involvement of faculty in committees, discussions, and planning sessions. Careful plans were made to encourage wider acceptance by teachers and students of vocational-technical education as comparable to the so-called liberal studies or college preparatory course offerings.

4. Modification of higher education offerings and programs was undertaken to challenge and attract youth into the fields of vocational training; these are developing drawing power without organized opposition at Quincy. At Parkersburg, it has been an uphill struggle; however, the victory in restructuring the State University Branch at Parkersburg is proving to be a dramatic success. This opens the way for post high school vocational-technical education in the local community colleges.

5. In the school plant design and added facilities for vocational-technical education, Wood County chose to disperse its occupational training between its two largest schools and use the school bus shuttle system to provide freedom of choice for all students taking courses in vocational-technical education.

Quincy won a hard decision to build a spacious new facility attached to Quincy High School and closely associated with North Quincy High School and Quincy Junior College. The model vocational-technical school facilities, which emphasize flexibility in design, equipment, and curriculum plan, have evolved from a liberal philosophy of technical education which accepts it on a coequal basis with "liberal studies" or college preparatory courses. This plant and program represent a dramatic break with tradition in vocational education.

6. In both communities the administration recognized the current financial limitations and proceeded to explore other sources of revenue to expand the programs and services

by appealing to private foundations with excellent success, making possible some unique programs. Neither community hesitated to prepare projects, proposals, and requests for federal and state funds as new legislation made these funds available--yet one school system was located in a politically conservative New England community and the other in a depressed politically conservative Southern-oriented area.

7. In each community the administration kept close to the board of education, fully informing it and getting its approval as the projects were readied, developed, and prepared for implementation. Each superintendent utilized talent on the staff and among the lay citizens in interpreting to the board and the community the changes desired and contemplated.

8. Citizens and consultants were used liberally in bringing influence, insight, and understanding to bear upon specific studies, projects and programs as the self-renewal of education moved along.

9. Neither the red herring of "states rights" or "local control" nor the bogeyman of "federal domination" was allowed to becloud the issue of good schooling for all children and youth as requests were readied for board action and submission to Washington for federal action. Because of the wide sharing in educational planning, the dissenters could not arouse enough reaction to block the return of the local taxpayers' dollars for better schools as these dollars have been returning from Washington for some years for housing, hospitalization, roads, old age security, farming, and welfare purposes.

10. Perhaps the most difficult job of all to be done in gaining acceptance of technical and semitechnical education at the college (community) level was the softening of resistance from the educational community or the "establishment," as it has been termed by James Conant. The nurturing of an acceptance of technical education by the faculty and the search for ways of bestowing prestige values on the vocational courses required dedication and exceptional leadership skill from the supervisory and administrative staff. This has not been fully achieved in either school, but the very facts that students are enrolling in increasing numbers before the programs are fully operative and that the dropout rates are declining give reason for a measure of optimism.

11. A broad drive to upgrade and expand the role of the counseling and guidance department in the pilot schools must be given much credit for changing student attitudes on "prestige courses" or "major selections" and particularly for initiating realistic and objective analyses of student interests, aptitudes, and purposes in counseling and occupational planning.

12. There is some hope that the "impregnable wall" which for generations has separated the vocational and college preparatory curriculums as well as the faculty which teaches and advises on either side is now ever so slowly beginning to tumble down. In time, we have great hopes that terminal vocational-technical education, with its associate degree or certificate of proficiency and the assurance of a good job upon graduation, will strike a balance with traditional education at the high school and community college levels. When this becomes a pattern, we may then dare to hope that the four-year college and university academic structures may begin to crack and to topple, and with the rubble, perhaps a bridge can be built over the void between academic and vocational education.

13. The one point at which both schools seemed to have real difficulty in upgrading and broadening the educational program was with general adult or continuing education. A search for the reasons for this revealed two: first, the serious local budget limitation combined with the failure of the state department of education to recognize adult education as a state responsibility, and, second, the lack of program and publicity to attract enrollees.

A Look to the Future

The vitality exhibited by each of the faculties and administrations gives us much assurance that educational developments are under way which will prove to be ongoing pilot studies for many other communities in the years to come.

The satisfactions accruing to the rank and file of the professional staff growing out of being a part of the team engaged in vital, vibrant, experimental and pioneering projects in liberalizing education to meet the whole spectrum of educational needs of young citizens, will, we believe, sustain a high level of professional endeavor for some years to come.

Recommendations for Further Activity

1. That OMPER or the U. S. Office of Education employ a small team of professional workers to analyze the processes of administrative and supervisory leadership in these two very different types of school communities and formulate a suggested set of guidelines which other officials, faculties, and citizens might profitably use in comparable assignments as they struggle for educational renewal and innovation.

2. That a unit of the federal government, preferably the U. S. Office of Education, assign someone--perhaps a retiring administrator, professor, or teacher with qualified skill and experience--to pursue the developments in these communities for some years, periodically reporting developments, problems encountered and methods of surmounting them, results of innovations of the past two years, and evaluation of the various aspects of the areas reported by the pilot study year after year, with a final appraisal and report in 1971 (seven years from the beginning of the studies), the findings to be published in an inexpensive report and distributed by the federal government free upon request to educators and laymen across the nation seeking help with the most troubled and critical area in American education today.

Suggested Educational Guidelines

School administration is a process rather than a goal. In our own fast-changing times the administrator's job changes even faster than in the past, so that we can make no sweeping claims for the generalizations we are about to set down. Nevertheless, there are some guidelines which emerge after more than two years of close collaboration with two school districts which were chosen deliberately to reflect some common problems and some approaches to these problems which should have relevance to other American school districts.

As an overall summary, there is a contradiction which has two parts:

1. School administration is undergoing some radical changes; the job of the superintendent today is vastly different than it was ten or twenty years ago. Where he

used to be the stabilizing force, he has today become a focal point for strife, almost a lightning rod to attract the claims of many segments of the community. Some of these claims are mutually exclusive, so that the threat of failure is greater than it was in the past. The most prominent example of this kind of conflict is, of course, in the area of race relations, where some parents want the school to go to great lengths to achieve integration while other parents want to maintain the status quo.

It happens that race relations were not a point of great strife in either Quincy or Parkersburg, but the example illustrates the type of conflict and the pressures which weight more heavily today on the typical superintendent than the burden he had to carry in the immediate postwar period.

Both communities were fortunate in having their schools headed by exceptionally well balanced men who were able to maintain their sense of direction as the project progressed.

2. School administration is based on a body of experience which is compound of leadership and participation. As if to contradict the description of turbulence and stress indicated above, the success of the superintendents in Quincy and Parkersburg rests largely on their competent planning, their involvement of the school board, their consultation with staff and faculty, and deliberate relations with citizens and parents.

Both schools systematically proceeded with some obvious but necessary and successful steps, such as these:

1. The chief administrative officer proceeded cautiously in all instances to acquaint himself with the schools, their problems, and the staff before pressing for action.
2. The central staff and teacher committees were involved from the beginning in identifying and describing the educational needs of the community.
3. When the point of comprehension was reached, the superintendent moved along with staff to acquaint the board of education with concerns he and his associates had recognized as deserving serious attention.

4. Extensive planning was done to assure the typical classroom teacher the opportunity of exploring new ideas, methods, and equipment and of sharing in the process of plant renewal and replacement as well as professional upgrading. The leaders carefully avoided allowing the process to become labeled a "one-man show."

5. An approach to education as a lifelong learning process helped to ensure not only critical examination of the post high school and dropout problems but the extension of the educational ladder downward to include the preschooler and the parents of the very young child.

6. Adult education was used not only to assist those seeking more schooling but also as a tool to interest and hold the attention of much of the community as floodlights were turned upon the educational ills and the shortcomings of the school system.

7. Persistent research into modern school policies and practices based upon sound educational psychology not only increased the number of staff members but helped to produce the evidence which made acceptance of institutional innovation and newer professional practices less traumatic for all involved in the enterprise. When the inevitable impasse on a given segment of the educational program was reached, educational leaders, rather than persisting to the point of rupture of good team relationships, lowered pressures; further study and experimentation followed, regrouping often occurred, and added data and new evidence were sought as the search for consensus or compromise persisted. Channels of communication were meticulously kept open, with complete freedom for all to question, to present a dissenting view, to produce evidence which might modify a tentative position or conclusion--all within an atmosphere free from the threat of reprisal.

8. When the inevitable impasse came, both administrators demonstrated their leadership by slowing their pace, by lowering the pressure they had build up. In effect, they were willing to lose some of the forward momentum they had

so carefully generated rather than risk a rupture of existing team relationships or test the limits of popular opinion and support.

Typically, they regrouped their forces, turned to study and experimentation, sought new data and evidence, and tried for a new consensus or a new compromise.

9. Open channels of communication played a crucial role. On the one hand they produced dissenting opinion, but on the other hand this also uncovered new ideas, with the not unimportant by-product of providing an outlet for opposition which might otherwise burst into open hostility or undermine the support of popular opinion and community leadership.

10. Similarly, faculty morale was considered a sine qua non to effective teamwork; therefore, constant attention was given to promoting professionalism among faculty members as essential to preserving the necessary esprit de corps.

11. Educational statesmanship in the administration of the schools at all times contributed substantially to the impact each school system made upon education regionally as well as statewide.

12. The strong beliefs on the part of both administrative staffs and teams concerned with upgrading vocational-technical education resulted in integrated programs which represent a radical break with the past by making vocational-technical education coequal with academic education and course offerings interchangeable, depending upon student interest and aptitudes, school records, and staff advisement.

13. The student advisers and board policy accept the point of view that it is the business of the school to follow the student through his school career into professional or technical education beyond high school and, finally, into successful job entry with the additional obligation to renew contacts should failure be encountered in school or on the job.

14. As curriculum revision got under way, outside resources were sought and tapped to supplement the school budget in the search for educational offerings to fit the needs of late twentieth-century youth and adults. These efforts were well rewarded in both systems.

15. National, state, and local manpower demands were taken into account along with the individual student occupational needs and vocational skill requirements as the problems of vocational-technical education were examined and programs were redesigned to prepare youth for employment in a changing world of technology.
16. The revision of curriculum, the expansion and renovation of plant, and the application for state and federal funds took place only after frequent conferences with state and national educational authorities to make certain no serious misunderstandings would jeopardize progress.

Probably the most far-reaching change in today's school, and today's school administration, is related to recent federal legislation dealing with education directly and indirectly. There have been for many years such programs as the impacted areas (PL 815 and 874) and school lunch and school milk service, but it is only in recent years that we saw the ten titles of the National Defense Education Act of 1958 (and the several amendments to this), followed by the new Vocational Education Act of 1963, the Economic Opportunity Act of 1964, and the Elementary and Secondary Education Act of 1965. There is more, so much more that it was entirely appropriate for the Office of Economic Opportunity to produce the Catalog of Federal Programs for Individual and Community Improvement (December 1965).

Without going into detail, it is obvious that one major aspect of school administration is the relationship of the local district to the great variety of federal programs. Where historically the advocate of federal aid to education thought in terms of relatively simple allocations of funds flowing from Washington, probably through the state department of education, to the local district (with some allowance for equalization among states and maintenance of effort), the present reality is vastly different. In effect, the federal laws put incentives on innovation: the school administrator, or someone acting on his behalf and under his direction, must look for ideas, write them up, submit them to Washington, revise them in the light of comments from the federal agencies (or in view of changing federal guidelines and administrative rules), and eventually look forward to the receipt of funds to carry out the stipulated purposes.

The point is not that this procedure is good or bad, but that it is vastly different from the job of the administrator in the past, that one measure of the competence of the leadership and the performance of the school system is the amount of "outside" money coming into the district. Some of the funds may be federal, and some may come from foundations. Many of them will be clearly for innovative, experimental, or demonstration purposes, and thus it is that the two districts described in this report, Quincy and Wood County, score high by virtue of the initiative and leadership which they brought to the quest for outside funds.

This quest they managed to superimpose on the "old" tasks and activities, but they were fortunate in having the backing of school boards which were willing to add some staff, or reassign some teachers, to the task of formulating and then carrying out the differing innovative plans, which are not always part of a smooth framework.

This can be seen in the far-ranging effects of federal programs, which, in fact, were intended by the Congress to have an impact at the local level. Among the unintended effects is the change in the role of school administration caused by the necessary emphasis on the securing of federal funds and the administration of these new laws that vitally affect the mores of many communities.

Because the Congress also is responsive to popular opinion, the results of these new activities have brought about curriculum and other changes which were overdue but not always feasible, either through lack of funds, lack of understanding, attitudes toward federal authority in education, or failure to recognize education as the prime instrument to cope with the current technological and social revolution lashing our nation and the world.

In the end, the real effect of all these forces playing upon the school must be measured by the improved education of each student. There is reason to believe that Quincy and Parkersburg have planned well, are designing flexible, forwardlooking buildings, are rebuilding (and will continue to revise) their curriculums, and eventually will produce a more competent and self-reliant workforce and citizenry.

Given the fact that the plans were completed only recently, that the new curriculums are just getting under way, and that all building is not yet completed, it is too soon to make any claims as to measurable results.

It is possible, however, to restate the view that school administration is a process rather than a goal, and that the manpower considerations of these two school districts have brought new understanding of the need for better educational planning for youth and new concepts of school administration. This report, it is hoped, has made a contribution to these ends.