To determine the research and planning tasks necessary for a regional career development program, the educational consulting firm of Engelhardt and Engelhardt, Inc. surveyed the needs and suggested a way to expand occupational education for adults and secondary students served by the King Philip Regional Schools. The need for career education and guidance was considered as the study cited five areas for investigation: the contributions of the home and elementary schools to career awareness, the economic underdevelopment of the region, its interstate character, building plans for school expansion, and the junior high and elementary school curricula. The main need for students appeared to be learning how to reach career goals and accompanying life styles. The tasks of an occupational education center were determined to be: assess continuing needs; utilize information retrieval and research; diffuse and disseminate information; provide individual attention to the students; initiate and implement a program of career education; and see that the program is properly administered, researched, evaluated, and developed. Peripheral ideas were considered. It was suggested that consultants and local resource persons be employed to meet the specific needs of the center. (A tentative list of contacts is included.) (AG)
DEVELOPING A REGIONAL OCCUPATIONAL EDUCATION CENTER
1973

for the schools of:
NORFOLK,Plainville, Wrentham
and the
KING PHILIP REGIONAL SCHOOL DISTRICT
MASSACHUSETTS
DEVELOPING A REGIONAL OCCUPATIONAL EDUCATION CENTER

KING PHILIP REGIONAL SCHOOL DISTRICT

William J. Costa, Superintendent of Schools
Joseph Nicastro, Director
King Philip Regional Vocational High School

King Philip Regional District School Committee

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BACKGROUND AND PURPOSES OF THIS PRELIMINARY STUDY

A brief exploration of the needs and potential for occupational education in the King Philip Regional School District has resulted in the findings and suggestions found in this brochure. The district includes a 915-pupil junior high school with grades 7-9 and a 1,035-pupil senior high school with an adjunct regional vocational high school. A common school committee sets policy for both the regional school district and the vocational high school. Three elementary districts, Norfolk, Plainville, and Wrentham, feed the junior high school. Enrollments are growing and a building program is being planned.

A Massachusetts Division of Occupational Education program review, conducted by Messrs. Gerard Antonellis, Paul Carbone, and Robert DiCarlo, was the stimulus for plans to expand career guidance and occupational education offered to King Philip students. Following a suggestion from the new Director of Vocational Education (Joseph Nicastro), the Superintendent of Schools (William Costa) and the King Philip School Committee decided to explore broadening the career development aspects of the curriculum. In order to mount an effort to prepare all youth for significant career decisions, the educational consulting firm of Engelhardt and Engelhardt, Inc. was asked to briefly survey the needs and suggest a route for expanding occupational education for adults and secondary students served by the King Philip Regional Schools. This consulting firm deals with all aspects of public schools and is capable of designing a balanced curriculum giving due recognition to realistic needs in occupational education. This report from the consultants suggests a way to better education and provide service to the community.

Outlined on the following pages are the research and planning tasks necessary for creating and maintaining a fruitful occupational or career development program. Mention is made of some preliminary ideas which should be evaluated during the forthcoming extensive planning effort. This preliminary study will allow the School Committee to set goals for a set of planning studies dealing with aspects of curriculum, building needs, administration, and instructional staff.

OCCUPATIONAL EDUCATION AND CAREER DEVELOPMENT

The recent national economic crisis has undoubtedly contributed to the rapid growth in demand for career guidance and preparation among today's youth, in the King Philip Regional School District and in the nation as a whole. No longer are students and parents regarding further schooling as a sure path to financial success and "happiness." A more realistic approach to the roles and economic opportunities in our society is being demanded of our schools - not to the exclusion of avocational and liberal arts, but as a companion to them. The development of basic skills is often improved, and is certainly not impaired, by integrating meaningful career awareness and occupationally relevant units into the curriculum. This is especially true when a broad gamut of careers is explored, from the unskilled to occupations demanding many years of schooling.

Occupational education is a guidance-centered curriculum. All students need career guidance and at some time would benefit from the occupational curriculum. Some school districts have used the term "career education" including some career guidance in all subject areas. The nature of occupational or career educa-
tion should be determined in a study of curriculum. To some degree the variety in breadth of the occupational programs reflects different approaches to the same needs. Both occupational and career education reach more students with true possibilities of developing marketable entry skills for careers immediately after graduation from high school. Many such students have gone on to further education, but have used their skills to meet expenses of post-high school education or gain jobs after obtaining a higher degree.

Terminology used in vocational, occupational, and career education is in a state of flux. The extended planning report should define its program by concept explanation and illustration. Funding sources must be studied so as not to create an artificial incompatibility of the program with sources because of nomenclature differences.

Career education is part of general education. It often does not require additional funds beyond those normally needed for good education. However, when vocational entry skills are taught through occupational education, costs may rise. For this reason, the federal and state governments and industry have often contributed to installation and operational costs beyond the normal amount given to nonoccupational education. It should be understood that successful occupational programs are usually launched with determined local effort. Broadening the scope of traditional vocational education makes such local effort easier, not more difficult.

Occupational education serves the needs of both the individual student and society, by allowing the student to choose a realistic career goal for which he is suited and from which society will benefit. When students are made aware of career opportunities, they can avoid sole preparation for areas having little demand for services or avoid an aimless, drifting course in secondary school with little preparation for self-sufficiency.

BACKGROUND OF THE COMMUNITY

The nature of the community should be considered in creating an occupational curriculum. Some of the factors and questions to be considered during the extended planning study would be:

1. What awareness of occupational opportunities do students obtain in the elementary schools and at home. Preliminary data from some college preparatory students show an unusually high number of skilled or supervisory labor backgrounds in the home. Does this mean the area is conveniently located to existing work? Are there any predispositions of parents to have their sons and daughters go to college, without realistic career information? Do parents in the community represent a varied and rich source of occupational experience?

2. The geographical area of the King Philip Regional School District is highly underdeveloped. The cover of this brochure shows the strategic location of the school district. Expansion of industry and residential housing units can be expected since several new interstate routes now serve the area. Traveling time for commuting and trucking is reduced by such routes as I-495, I-95, and I-295 connecting industrial areas around Worcester, Framingham, Dedham, Attleboro, Woonsocket, and Providence. A future extension of I-495 would place the region on a route to Taunton and Cape Cod. The tourist, hotel-motel, and restaurant industry is one cluster of occupations which will probably expand greatly.

Industrial expansion will probably continue long into the future with new connecting routes, such as interstate route 84, planned for the next decade between Providence and Hart-
ford. A well administered occupational program can more than pay for itself by attracting industrial base to the school district. To reap such benefits, occupational education planning should be coordinated with local, county, state, and regional planning agencies.

3. The area served by graduates of the King Philip Regional School District is interstate in character. Liaison between a Massachusetts school district and Rhode Island planning, educational, and placement agencies must be explored. Models for efficient cooperation must be developed by the administration as the research and placement phases of the occupational program develop.

Preliminary data show that students and their parents prefer to look at further schooling (including colleges, proprietary technical schools, and business school[s]) and job opportunities near home. The world of career opportunity might primarily be defined as shown on the accompanying diagram. It should also be noted that current choices for further schooling are also predominantly regional. In the opinion of the consultants this fact has bearing on the career development of college preparatory students.

4. Because the region is growing, school building expansion is inevitable. The nature of such expansion should consider the occupational educational program. A broad career education program may involve interdisciplinary activities not easily managed in a school of classical design. The expansion of school plants should involve a total evaluation of existing facilities in light of curricular needs. Conversion of some spaces to other uses may provide a totally new opportunity for curricular innovation.
5. Since attitudes toward work are formed at early ages, and since many introductory concepts can be handled at lower ages than heretofore thought possible, the forthcoming planning study should consider not only the senior high school curriculum, but that of the junior high school and elementary schools. However, the regional school district includes the elementary schools only in a geographical sense. The planning study should explore mutually acceptable ways for a Regional Occupational Education Center to be of service to elementary districts so that career awareness can be nurtured in elementary schools. The consultants have seen many excellent elementary programs in career development that complement and stimulate the existing goals of elementary education.

The Occupational Education Center might function at three distinct levels of schooling. In elementary years, pupils would obtain an awareness of occupational opportunities and life-styles or roles in the community. They learn of their own developing abilities and form attitudes germane to a career choice; for most of us this must involve a wage or salary-earning activity.

In the upper elementary and junior high school years, various orientation courses can be implemented giving a concentrated time for career education, with home economics, industrial arts, and business teachers giving a variety of experiences. Social studies, science, art, and other disciplines could continue their references to careers. Guidance would begin to sharpen the self-evaluation of pupils in reference to career clusters.

Once students are within the regional district's schools, provision for exploratory and specific skill instruction can be flexibly administered under proper organization.

NEEDS OF THE STUDENT

The target group of students for an Occupational Education Center's programs must be defined - some school districts attempt to reach all students through various programs. The present guidance department has some excellent follow-up studies of graduates and provides some occupational guidance upon which plans for the occupational program might expand. The percent of enrollment that should be reached by occupational programs in guidance and training should be determined by a future study. Periodic redefinition of the target group and revision of the occupation program should occur with a well-designed assessment of needs.

The nature of an occupational program varies with the outcome goals of the program. Building needs, staffing, and equipment are based on enrollment forecasts for specific courses. Although forecasts are rarely exact, the opportunity for student choice can be made optimal by setting some goals for the program. The accompanying chart suggests possible classes of occupational preparedness for percentages of a graduating class. (The extended study should confirm or modify these figures.) Note that no category is planned for the "general" student; all students are to have at least a tentative occupational goal. The classification scheme inverts the traditional order of esteem for post-high school activities. A student who qualifies for immediate gainful employment on the basis of school training is placed in group I (vocational entrant). This student may choose to go on to a technical program of less than four year's duration or may elect to attend a four year college (possibly via a two-year, liberal arts junior college) full or part-time. The individual has more choice of post-high school activity when trained in a skilled vocation and prepared to benefit from college studies. The student in groups II and III, is forced to obtain more schooling in order to be self-sufficient.
OCCUPATIONAL PREPAREDNESS OF THE GRADUATING CLASS

(If eligible, a graduate is classed in group I, even when going on to post-high school education)

Preliminary analysis of students in group III, indicates a higher than national percentage of graduates from the King Philip Regional High School intend to stop further education after obtaining a BS or BA degree. An unusually high percentage of King Philip female seniors who have taken the College Boards are undecided as to the length of their post-high school education. Such data indicates a need for a strong career education program for pre-technical and college preparatory youth. It is not that students lack awareness of occupational interest fields (only 4 per cent of students answering the College Board's optional questionnaire in 1971-72 were undecided as to their field of study); the main need of students appears to be in learning how to reach their career goals and accompanying life styles. For some, the high school must take a more active role in preparing students for a realistic career path. Flexibility of graduates to change jobs (or even careers) is a necessary attribute that can be set as a goal for occupational programs.

TASKS OF AN OCCUPATIONAL EDUCATION CENTER

The proper implementation of a career development or occupational curriculum involves the full spectrum of educational opportunities: elementary, secondary, community college, technical institutes, and adult education. Less closely allied with the constituents of the local public school system are the state and independent institutions of higher learning. Career development education requires high level liaison with agencies outside the school system, especially in planning and evaluation stages. It has become obvious to the consultants that a separate system of vocational education is not able to reach the numbers of students which a more integrated approach to occupations would allow. The entire school system must establish career education as a priority in order to afford the manpower necessary to produce the accountability so inherent to any occupational program. The school system might be able to isolate itself with a stress on academic instruction, but career developmental programs demand constant alignment with the "real world" of adult life. Adults need to read, write, estimate, classify, attend to beauty, and be aware of variety in this world, among other behaviors; therefore the career oriented school cannot neglect such areas as the fundamental tool skills, and fine arts. In fact, occupational orientation often stimulates learning in these areas. As the reader will see, the following list of potential tasks applies to all subjects in many instances. The sharing of evaluation personnel between occupational disciplines and other subject areas is an example of a benefit from organizing a staff of individuals to implement the concept of an Occupational Education Center. To a high degree, talent now on the school district's staff can assume the new roles required by the following potential tasks of the Occupational Education Center:
1. **A Continuing Needs Assessment**
   a. gather statistical data on employment opportunities
   b. conduct follow-up studies on graduates
   c. conduct evaluation of instructional outcomes
   d. evaluate and revise instructional goals
   e. make demographic analysis of pupil and family characteristics

2. **Information Retrieval and Research Utilization**
   a. search for possible alternative solutions to current needs
   b. assist logistical support in tool and equipment selection
   c. provide inventory control, performance records
   d. provide inservice workshops and "change agent" work at elementary and secondary levels

3. **Diffusion and Dissemination**
   a. distribute knowledge of fruitful practices
   b. operate a public information system to taxpayers, students, and graduates
   c. provide an employer information system

4. **Individual Attention and Follow-up**
   a. counsel students during exploration and orientation phases
   b. provide teacher-coordinator reviews with employers and cooperative education students
   c. provide retraining and placement services in cooperation with other agencies
   d. provide individualized instruction with skill attainment, not time spent in class, as a criterion for advancement to the next unit of instruction

5. **Instruction and Implementation**
   a. give all students an active educational experience in career options without socially separating students with different career goals (except with a minority of students needing specialized instruction at a separate, regional technical high school)
   b. provide opportunity for a few junior, senior, or post-graduate students to attend vocational-technical programs in regional institutions when such programs are not offered by the Occupational Education Center
   c. provide programs which allow students to progress at their own rate and enter the career ladder at a position commensurate with their abilities
   d. allow a student to change career goals at any time while in high school, even if it requires an additional year of schooling
   e. educate students so they can easily adapt to changes in employment opportunities during their lifetime by clustering of skill development units
   f. administer the curriculum in response to the "needs assessment" and as a conglomerate of related skills necessary for personal success as defined by an individual's goals
   g. prepare students for the various roles played by individuals in our society, with emphasis on how occupations influence these roles
   h. work toward increased utilization of facilities and teaching staff by innovations in scheduling and giving increased attention to a variety of target groups of students
6. Administration, Research, Evaluation, and Development

a. develop a local accountability system for the career development and occupational education

b. increase the participation of advisory councils and committees

c. provide for teacher renewal by cooperative programs with industry and educational institutions

d. adapt promising innovations to use in the local educational programs - e.g., define clusters on the basis of student aptitudes and interest, rather than by industry

e. provide adequate long-range planning with a judicious selection of job-entry programs

f. organize counseling and placement services so that the school is involved with occupational success and is not detached from such a crucial reward

g. demonstrate that the schools can effectively participate as a positive influence in the economic development of a region

h. respond as an element in the system of teacher training for career development programs

The existence of on-going business and vocational programs with wide-vision staff members in other areas, has led to many promising ideas which should be evaluated in a building needs or more detailed curricular study. Some ideas which may provide solution to some needs are:

1. Expand job entry skill and pre-technical programs into such areas as

   Jobs related to the Hotel, Motel, Restaurant Industry such as Culinary Arts, Management, Maintenance, and Personal Service
   Nurse's Aide (Child and Geriatric)
   Horsemanship
   Dental Assistant
   Information Retrieval
   Entrepreneurship (Trade oriented business education)
   Teacher Aide (with parent and child)
   Design Cluster
   Jewelry Craft and Art

2. Restructure junior high and senior high school offerings that provide background economic and social information in relation to choice of career. Home economics might offer units in family economics related to earning power of various occupations. Social studies may discuss employee/employer/small business problems.

3. Extend hours of school to late afternoon, evenings, and weekends. Operate a year-round program at the Occupational Education Center for students who lack time in a college preparatory program or who have changed career goals in the junior or senior year.

4. Expand arrangements with Norfolk Community College to allow some high school seniors to take courses at the college.
5. Increase demographic data gathering now done by guidance department. Survey parents as part of the assessment of needs.

6. Combine industrial arts, home economics, business, and vocational courses into an occupational conglomerate for coordinated leadership. The relationship of the fine arts department and other departments should be studied.

7. Expand job placement capabilities with national firms if and when graduates show a desire to relocate out of the area shown on the cover of this brochure.

ADMINISTRATION OF THE CENTER

Occupational education, with broad career development emphasis, requires smooth and efficient administration. By its nature, the program should not be administered separately as an independent system of vocational education. It is also desirable that existing personnel be reorganized to accomplish many of the tasks just listed in order to avoid increasing expenses to such a degree which might prevent the creation of an Occupational Education Center.

Any administrative organization must be tailored to the specific situation. Few school districts reflect the King Philip situation exactly. For this reason, the extended study should involve the creative contributions of consultants and future liaison or resource persons, as well as the local staff. If done correctly, the King Philip Regional Occupational Education Center could be an exemplary demonstration project for the state and nation. Because of favorable state laws and organization, Massachusetts provides an excellent setting for truly integrated exploratory and orientation experiences in occupational education. The growth situation in the local district provides opportunity for tailored facilities in which to implement a new program. The interstate nature of employment opportunities between Rhode Island and Massachusetts provides a challenge in needs assessment, placement, and cooperative education.

Close liaison with Messrs. Antonellis, Carbone, and DiCarlo of the Massachusetts Division of Occupational Education and the occupational specialists in the regional offices of the State’s Department of Education (Worcester and eventually Wareham) will continue. Internal planning efforts have begun and are awaiting the resumption of the extended planning studies. A benchmark meeting was held on December 11, 1972 at which aspects of this report were discussed by the educational consultant and members of the planning team (to be expanded) listed below. The desire of the schools to move forward with prompt and proper planning was evident at this meeting.

ATTENDEES AT THE DECEMBER 11, 1972 PLANNING MEETING

William Costa, Superintendent of Schools
David Engelhardt, Consultant
Paul G. Lieneck, Haynes, Lieneck, & Smith Corp., Architects
Alden Mucciarone, Chairman, Vocational Advisory Committee
Joseph S. Nicastro, Director of Vocational School
Francis O’Regan, Director of Guidance
Joseph Permado, Haynes, Lieneck & Smith Corp.
John Robbins, Chairman, Business Education Department
Sam Strickland, Principal, Junior High School-North
Edward Switzer, Principal, High School
William White, Business Administrator
Aside from the general educational consultants of Engelhardt and Engelhardt, Inc. it is anticipated that the following individuals will be among special consultants who shall remain as local institutional resource persons for the Center's operation. The resources of the local institutions would be available to solve those technical problems so specialized that the build-up of pertinent in-house staff would not be justified.

**LOCAL INSTITUTIONAL CONTACT CONSULTANTS**

Robert S. Butters, Director  
Occupational Education and Leadership Program  
Northeastern University

Kenneth Ertel, Director  
Occupational Center  
University of Massachusetts (Amherst)

George James  
Director of Occupational Education  
Fitchburg State College

William Kavanaugh  
Asst. Professor of Industrial Education  
Rhode Island College

It is suggested that an administrative study be undertaken; it should outline the network of responsibilities in such general areas of concern as:

1. general logistical support  
2. research and evaluation  
3. instructional program development  
4. program implementation  
5. central coordination, funding, planning, and liaison

An occupational program has far more contact with outside agencies than any other instructional program. Some contacts with local industry and regional planning agencies must be made by high level, school district personnel. The following list of contact agencies exemplifies the need for detailed planning of the prospective administrative organization. These contacts can serve in joint planning, cooperative operation, or as sources of data for evaluation and long-range planning.

**A TENTATIVE LIST OF CONTACTS**

**Governmental and Quasi-Governmental Agencies**

Bellingham Industrial Development Commission  
Massachusetts Comprehensive Area Manpower Systems, Division of Employment Security - Attleboro, Boston, and Taunton  
Massachusetts Department of Commerce and Development  
Massachusetts Department of Labor and Apprenticeship Training  
Massachusetts Department of Labor and Industries  
Massachusetts Director of Employment Professional Services - Manpower Needs

The roles of the advisory council and advisory committees should be carefully outlined in the extended study. The district is currently appointing advisory group members of exceptional quality, reflecting local and regional concerns.
Massachusetts Division of Employment Security - Boston, Norwood, and Taunton
Massachusetts Division of Occupational Education
Massachusetts Rehabilitation Services
Rhode Island Development Council
Rhode Island Division of Employment Security
Rhode Island Statewide Planning Programs
South Shore Industrial Development Council
U. S. Department of Health, Education, and Welfare Regional Office - Boston
U. S. Department of Labor

Unions
AFL-CIO AFSC & ME No.646
AFL-CIO Joint Board of Attleboro
Amalgamated Clothing Workers of America - Worcester
American Federation of Government Employees
Bricklayers, Masons, Plasterers, & Cement Finishers No.6, No.7
Building Laborers Union of America No.243
Hotel and Restaurant Employees Association - Worcester
International Association of Bridge Structural and Ornamental Ironworkers No.57
International Brotherhood of Electrical Workers No.96, No.2313, No.2315, No.2322, No.2375
International Brotherhood of Pulp, Sulphite, and Paper Mill Workers and Local No.453
International Printing Pressman's Union of North America
International Union of Electrical, Radio, & Machine Workers - AFL-CIO
Lithographers and Photoengravers Union - Worcester
Machinists and Aerospace Workers No.1175, No.1359
Meat Cutters and Butchers Workman - Natick
National Federation of Government Employees
Newspaper Pressmen's Union - Printing Pressmen No.29
Norfolk County Carpenters Union and District Council
Painters and Allied Trades No.296
Papermakers and Paperworkers United No.889
Pipefitters No.408
Playthings, Jewelry, and Novelty Workers
Plumbers No.4
Race Track Employees Guild, Inc. No. 28
Retail, Wholesale and Department Store Union No.59, No.509, No.519-B, No.583-A, No.826, No.1435
Sheet Metal Workers No.127
Textile Workers of America
United Brotherhood of Carpenters and Joiners of America No.107, No.867, No.1479
United Steel Workers of America No.3623, No.3722, No.4124, No.6830, No.7717

Employers
Boston Gear Company - Quincy
General Dynamics - Quincy
Gillette Company
International Business Machines - Worcester
Raytheon - Lexington and Norwood
Texas Instrument - Attleboro
Post-Secondary Institutions

Bridgewater State College
Bristol Community College
Dean Community College
Fitchburg State College
Franklin Institute
Massachusetts Junior College at Massasoit
Norfolk Community College
Northeastern University
Rhode Island College
Rhode Island School of Design
Southeastern Massachusetts University
Springfield Technical Community College
University of Rhode Island
Wentworth Institute

Other School Systems

Attleboro Vocational High School
Blue Hills Regional Vocational School
Bristol-Norfolk County Regional Vocational School
Foxboro School System
Franklin High School
Milford School System
Millis School System
North Attleboro High School
Henry O. Peabody School, Norwood
South Easton Regional Vocational High School
Walpole School System

Chambers of Commerce

Attleboro Chamber of Commerce
Braintree Chamber of Commerce
Brockton Chamber of Commerce
Canton Chamber of Commerce
Council of Rhode Island Chambers of Commerce
Dedham Chamber of Commerce
Dorchester Chamber of Commerce
East Providence Chamber of Commerce
Greater Boston Chamber of Commerce
Greater Franklin Chamber of Commerce
Greater Providence Chamber of Commerce
Massachusetts Chamber of Commerce
Newton-Needham Chamber of Commerce
North Attleboro Chamber of Commerce
Norwood Chamber of Commerce
Pawtucket-Blackstone Valley Chamber of Commerce
South Middlesex Area Chamber of Commerce - Framingham
South Shore Chamber of Commerce - Quincy
Taunton Chamber of Commerce
Walpole Chamber of Commerce
Worcester Chamber of Commerce

Other

Norfolk Personnel Managers' Association
South Shore Dental Association
Massachusetts Vocational Directors' Association