THE USE OF INDUSTRY-ADVISORY COMMITTEES FOR EVALUATING SPECIFIC VOCATIONAL AND TECHNICAL EDUCATION PROGRAMS HAS LONG BEEN RECOMMENDED BY VOCATIONAL EDUCATORS. CITIZEN EVALUATION OF PUBLIC OCCUPATIONAL EDUCATION IS PROBABLY THE MOST IMPORTANT FACTOR AFFECTING IT WHEREBY CITIZENS ASSIGN RESPONSIBILITIES FOR OCCUPATIONAL EDUCATION AND ADMINISTER OR WITHHOLD FUNDS, PERSONNEL, AND FACILITIES. THIS PAPER DESCRIBES THE STRATEGY BEING DEVELOPED IN THE USE OF INDUSTRY-ADVISORY COMMITTEES FOR EVALUATING VOCATIONAL AND TECHNICAL EDUCATION IN ARKANSAS INCLUDING ORGANIZATION OF THE EVALUATION COMMITTEES AND GUIDELINES AND BACKGROUND INFORMATION WHICH SHOULD BE PROVIDED FOR THEM. THE APPENDIXES INCLUDE THE SCOPE OF THE PROJECT FOR EVALUATING THE VOCATIONAL-TECHNICAL PROGRAMS IN ARKANSAS, FUNCTIONS OF THE REGIONAL ADVISORY COUNCILS, AND A 3-YEAR PROGRAM PLAN FOR AN ADVISORY COMMITTEE. NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT. (CH)
USE OF INDUSTRY-ADVISORY COMMITTEES
AS A TECHNIQUE FOR
EVALUATING VOCATIONAL AND TECHNICAL
EDUCATION PROGRAMS

Prepared for the National Conference
On Evaluating Vocational and Technical
Education Programs
Atlantic City, N. J.
October 6-9, 1968

Samuel M. Burt
The W. E. Upjohn Institute for Employment Research

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.
The use of industry-advisory committees for evaluating specific vocational and technical education programs has long been recommended by vocational educators, but seldom has the effort to do so been other than superficial and sporadic. However, a sufficient number of instances of effective utilization have been documented to suggest that industry advisory committees can be of extremely valuable assistance to educators in evaluating vocational and technical education.\textsuperscript{1/}

In the past several years efforts at evaluating vocational programs of local schools and school systems by using industry advisory committees has been receiving some attention. Dr. Harold Byram of Michigan State University has experimented with this concept and has published a manual of procedures now being used in a research project in several states.\textsuperscript{2/} Dr. H. M. Hamlin has proposed a four-state project utilizing citizen evaluation teams.\textsuperscript{3/} Michigan has recently utilized 28 citizen advisory committees to evaluate present and future needs for vocational and technical education in that many regional areas of the State. The philosophy on


\textsuperscript{2/} Harold M. Byram and Floyd McKinney, \textit{Evaluation of Local Vocational Education Programs}, Michigan State University, Lansing, March 1968. The reports are on file with the Michigan State Department of Public Instruction, Division of Vocational Education, Lansing, March, 1968.

which use of advisory committees is based is well stated by Hamlin:

"Citizen evaluation of public occupation occupational education is probably the most important factor affecting it. On the basis of their evaluations (Ed. note: formal or informal, knowledgeable or not) citizens assign responsibilities for occupational education and provide or withhold funds, personnel and facilities." 

In this paper, I will be describing the strategy being developed in the use of industry advisory committees for evaluating vocational and technical education in Arkansas. The project was initiated in February, 1968, and is scheduled for completion of its first phase in early 1969. The funds for this project were made available by the U. S. Office of Education.

\[4/\] Hamlin, *op. cit.*
INTRODUCTION

The decision to utilize industry advisory committees to evaluate occupational education programs offered by various types of public and private schools throughout an entire State was arrived at by the Arkansas State Department of Education, the Governor's Office and the Industrial Research and Extension Center of the University of Arkansas, in consultation with The W. E. Upjohn Institute for Employment Research. The basis for this decision was rooted in past experience with the results of several evaluative studies by educational research organizations which had produced voluminous reports, but little action in improving vocational and technical education. Furthermore, Arkansas educators, industrialists, economic developers, manpower specialists and legislators had not only expressed dissatisfaction with the reports, but also with vocational education - the established programs as well as the new programs being initiated. The criticism stemmed primarily from the current need for skilled manpower by employers throughout the State, and concern about the State's ability to attract new business and industry. Thus it seemed eminently logical and feasible to involve these concerned individuals in an in-depth project to evaluate vocational and technical education so that they themselves would not only make the recommendations for any needed changes and improvements, but would also take the needed action to make these recommendations effective.
Organization of the Evaluation Committees

Recognition of the impact of vocational and technical education on the economic development of the State and its geographic socio-economic regions led to the decision to organize the evaluation committees in accordance with the already established 8 Economic Development Districts. It was also decided to establish a State committee to provide necessary liaison and coordination. These committees were titled:

State Manpower Advisory Council for Economic Development

Regional Manpower Advisory Council for Economic Development.

While the titles may appear overly-long and clumsy, they clearly expressed the function of these groups.

The Project Director (the staff member assigned by the Industrial Research and Extension Center of the University of Arkansas) and the Director of Industry Services for the Division of Vocational and Technical Education (assigned to the project by the State Department of Education) and the consultant from the Upjohn Institute drew up a list of business and industry, trade associations, government agencies and other groups to be represented on the State Council. These organizations and agencies were then requested, in a letter from
the Commissioner of Education explaining the project, to
appoint representatives to the State Council. Also ap-
pointed to the State Council were representatives of the
Governor's office, and several legislators. At least one
leading employer from each Economic Development District
was included in the State Council.

At the organizational meeting of the State Council,
chaired initially by the Director of the Industrial Re-
search and Extension Center, representatives from IREC, the
State Department of Education, and the Upjohn Institute
presented their plan for the evaluation project. The group
endorsed the project plan, agreed to organize, and elected
a chairman, a vice-chairman, and a secretary. The repre-
sentatives from the various Economic Development Districts
agreed to act as temporary chairmen for their regions. In
consultation with the project staff, they drew up a list of
individuals who were to be requested to serve on the Region-
al Councils.

Organizational meetings of the 8 Regional Councils
were subsequently arranged by the temporary chairman. The
agenda was the same as for the State Council meeting. The
temporary chairmen, all representatives of industry, were
elected as the permanent chairmen (as had been expected
when appointed to the State Council) in all but one instance.
Thus representation of each Region on the State Council was
automatically assured.
The Secretary for each Council was either an educator, or a government agency employee.

At both the State Council, and all the Regional Council meetings, literature was provided concerning the economic, educational and demographic characteristics of the State, as well as an outline of the project plan. A description of and rationale for the project was also provided, as well as an outline of the information to be provided by IREC, the State Department of Education and Upjohn Institute, (Appendix A). Responsibilities of the Council members were also outlined briefly (Appendix B).

It should be noted that during the various Council meetings, the participants exhibited a considerable knowledge concerning the problems and programs of vocational and technical education. Some had formerly been teachers, school officials and members of boards of education; several others had or were serving on school occupational advisory committees, the State Board or the State Advisory Council for Vocational Education; some were presently, or had been personnel and training directors. A number of the Council members had or were serving on local, regional and state economic development committees. In all, over 225 people were brought together to form the State and the Regional Manpower Advisory Councils for Economic Development, as follows:
<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry and Business</td>
<td>116</td>
</tr>
<tr>
<td>Labor Unions</td>
<td>12</td>
</tr>
<tr>
<td>Educators</td>
<td>26</td>
</tr>
<tr>
<td>Employment Security</td>
<td>22</td>
</tr>
<tr>
<td>Chamber of Commerce</td>
<td>13</td>
</tr>
<tr>
<td>Economic Development Agencies</td>
<td>14</td>
</tr>
<tr>
<td>City and County</td>
<td>4</td>
</tr>
<tr>
<td>Legislators</td>
<td>15</td>
</tr>
<tr>
<td>Agriculture</td>
<td>14</td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
</tr>
</tbody>
</table>

**Providing Guidelines and Background Information for Use by the Councils**

Basic to the strategy of this project are two concepts:

1. **don't ask for advice from people** until they have some knowledge and background of the situation and the problem.
2. in order for "lay people" to evaluate a situation or organization as complex as an educational system or even a single school, they must be provided guidelines and checklists with which to conduct the evaluation.

A Background Information

1. Background Papers

To meet the first conceptual objective, all members of the Councils were provided a statement of generally accepted goals for occupational education. In addition, brief background papers will be provided by the Upjohn Institute consultant and mailed to all Council members with a covering memo from the Chairman of the State Council. The titles of the papers already submitted are:

1. A Look at Arkansas High Schools and Their Occupational Education Programs

2. A Look at Private Trade and Business Schools in Arkansas

All background papers, progress reports and memoranda to Council members and Regional Council Chairmen are mailed over the signature of, or with covering memo from the State Council Chairman. Special letterheads for the State Council, listing all members, were printed for official correspondence use.
3. **Industrial Plant Site Location and Vocational Schools and Programs**

4. **An Overview of Arkansas Student Enrollments, Course Completions and Expenditures for Federally Reimbursed Vocational Education Programs**

5. **Enrollments, Income, Expenditures and Programs: Area Vocational-Technical Schools in Arkansas**

No recommendations are contained in these background papers since their purpose is to serve as a basis for discussion at the first of a series of scheduled Regional and State Council meetings. At the time this paper is being written, we are speculating that the discussions which will take place during these meetings will provide initial informational inputs enabling the Council members to better understand what they will be learning about the schools and school system in Arkansas from both their personal observation as well as their review and analysis of the various background papers provided them.

While not planned for initially in the project design, these background papers and other reports will be submitted for comment to the program specialists of the State Department of Education, principals, directors and supervisors of selected local schools and school systems prior to the development of concrete recommendations by the Councils. We have already become aware of the fact that these background papers must be as brief as possible, with the information presented in a few easily understood tables, and conclusions succinctly drawn. Furthermore, the information should be in terms of employer needs and interest, e.g., skilled manpower shortages and surpluses by occupation, number of people being trained for these occupations, and the costs involved by school and program.
2. **Comparative Analysis of Statistical Information Provided by the Schools**

During the organizational meetings of the Regional Councils, the members recommended that, to the extent possible, they be provided information concerning school occupational education programs in the form of business balance sheets and profit-loss statements. They felt they would be better able to understand and interpret information presented in terms of business and industry operations. Accordingly, an Assessment Questionnaire was prepared for mailing to all secondary and post-secondary schools which sought such information as types and sources of income; expenditures by purpose; value of fixed assets such as land, buildings and equipment; student turnover rates; facility utilization rates; and costs of occupational education programs. In addition, of course, other types of information were requested, such as courses offered, number of instructors and guidance counselors, charges to students, follow-up reports on graduates and drop-outs, and enrollment by grade level. Before mailing the Questionnaire, it was tested in several schools in a region whose Council Chairman (The Director of Industrial Relations for a major manufacturer) was extremely knowledgeable and interested in vocational education. He also assigned several members of his staff
to help develop and "trial-run" the other questionnaires and guidelines utilized thus far in the project. The Questionnaires were mailed to over 400 schools throughout Arkansas, with a covering memo from the Commissioner of Education. Thus far, only 10% have been filled in and returned. Most of these do provide useful information concerning income, expenditures, fixed assets, and student enrollments, but only a few have filled in occupational program cost information. Investigation of these returns indicates that the school administrators do not maintain the kind of records which will provide the businessman much of the kind of information he uses in analyzing and evaluating his operations, nor do the administrators concern themselves too much with cross-checking the correctness of the figures submitted.

Whether or not the matter of obtaining filled-in Questionnaires from all of those schools which have not yet submitted their forms will be discussed at the forthcoming meetings of the Regional Councils. However, sufficient useful comparative analytic data has been prepared from the information provided to serve as a basis for discussion at the first series of Regional Council meetings.
It should be pointed out that the Regional Council members want to know how much money is being spent by schools in their region and its communities and what it is costing the taxpayer in each regional area to obtain the kinds and number of skilled manpower the schools and other educational and training facilities are currently producing. While this data may be available on a State-wide basis, the Council members want to know, as one member expressed it, "How much is it costing us to run that crummy school down the block from my plant?" It is obvious that macro-statistics have much less impact and meaningfulness than statistics pertaining to a school with which an individual or group is familiar.

While there is no difficulty in obtaining information based on records maintained by schools and the State Department of Education to meet reporting requirements of the U. S. Office of Education, it is extremely difficult to obtain any other meaningful statistics for comparative and analytic purposes. It might be well for the U. S. Office of Education to review its reporting requirements with the assistance and advice of manpower specialists, economists and representatives from industry and business.

A potentially extremely useful source for obtaining background information concerning occupational education
and training are the reports prepared for CAMPS. However, since the CAMPS regions in Arkansas differ from those of the Economic Development Districts, it is difficult to utilize the available information on a regional basis. In the future, it would be well to consider organizing CAMPS and other economically-oriented regional areas within the same boundaries.

3. **Guidelines and Checklists**

(a) **Adopt-a-School**

To assist the Council members, particularly those from business and industry, to become intimately familiar with school programs and problems so that they can understand and interpret data being presented by the project staff, each member was asked to "adopt" a school in his community. A letter was sent to each Regional Council Chairman, requesting him to assign a school to each industry member, and to provide him a guideline questionnaire prepared by the project staff. The purpose of this guideline (Appendix C) was to suggest questions which the Council member should discuss with the school's officials when visiting the school. No reports of these visits were requested -- our concern was primarily that of facilitating dialogue between the Council members and the school's staff.
To further acquaint each Council member with occupational information concerning his "adopted" school, copies of the completed School Assessment Questionnaires, after analysis by Upjohn Institute, are returned to the Regional Council chairmen for forwarding to the Council member who has adopted the school.

This Guideline was also used by some 40 Council members when they visited 4 vocational schools in States surrounding Arkansas. The visitations were arranged by the project representative from the State Department of Education in order to familiarize Council members with vocational programs in schools other than those they would be studying in Arkansas.

At the time this paper is being written, we do not know how many schools have been "adopted".

(b) Evaluation Guidelines

1. School Occupation Program Evaluation

To determine the qualitative level of the occupational education and training programs offered by the various public and private schools and institutions in Arkansas, each such facility has been requested by the State Department of Education to have their occupational advisory committees conduct an evaluation of the programs offered by the school. An Evaluation Guideline (Appendix D)
was developed by the project staff and sufficient copies for each occupational advisory committee were mailed to the schools. The evaluations are to take place sometime prior to October 15. When the date for the evaluation visit has been set, the school director or principal is to advise the Chairman of the Regional Council in the area in which the school is located. The Chairman will then notify the Council member assigned to that school to be on hand as an observer during the evaluation process.

The Evaluation Guideline is based on the "Evaluative Criteria for Vocational, Trade and Industrial Education" of the American Council on Education. The format, however, was simplified for use by industry people.

It contains 5 sections, as follows:

Physical Facilities
Equipment, Tools and Supplies
The Students
Instructional Program
Instructional Staff

Instructions for using the guideline are extremely simple. The completed evaluation is to be left with the school director or principal, who is to prepare his comments as to findings, and then forward a duplicate copy to the Regional Chairman. This copy, in turn, is to be forwarded to Upjohn Institute staff for review and integration into a special
Implicit in this phase of the project is the assumption that all schools offering occupational education programs do have advisory committees for the programs. While this is certainly true for all the area vocational-technical schools in Arkansas, it may not be true for other institutions. For those schools, the Regional Councils will offer to assist in the establishment of occupational industry advisory committees.

The question has been raised as to whether or not a school advisory committee evaluation would be a "whitewash" of the existing program. It could be; but my experience with industry advisory committees involved in evaluations of specific occupational education programs has been the opposite. They are vitally interested in having their school provide as excellent a program as possible, and, when given the proper opportunity and guidance, will criticize its weaknesses and recommend needed changes.  

---

6/ Burt, op. cit.
2. **School Industry Advisory Committee Evaluation**

One of the major outcomes of the evaluation project is to develop continuing effective cooperative relationships between industry and schools in the conduct of occupational education programs. Therefore, it was felt necessary to conduct an assessment of the effectiveness of presently organized occupational industry-education advisory committees. The instrument for this assessment (Appendix E) is based on the results of the study I conducted of advisory committees operations. It will be mailed to all schools in Arkansas which offer vocational and technical education programs, is to be filled in by the chairman of each advisory committee, and handled in the same manner as described for the "School Occupational Program Evaluation Guideline". A by-product expected from the use of this Advisory Committee Evaluation Guideline (as well as from the Program Evaluation Guideline) is that school officials and industry people will have a better understanding of how to both more effectively conduct an occupational education program and to utilize industry-education advisory committees.

Background Information - Economic and Demographic

At the same time that the Regional Council Members are being provided, and developing for themselves, background information concerning the schools and school system, they are also being provided economic, industrial and demographic information by the Industrial Research and Extension Center of the University of Arkansas. (See Appendix A). In addition, IREC will present a detailed analysis of their high school and post-secondary school drop-out and graduate student follow-up study currently in progress. The study is limited to students enrolled in occupational education.

Assimilation and Integration of Background Information

A minimum of two full-day meetings of each Regional Council have been scheduled during the 4 months of September through December. At these meetings the project staff will review all the background papers previously presented, introduce new reports and serve as resource people during the discussions. The first series of meetings are planned primarily for the purpose of tying together all the pieces of information resulting from the various studies and activities of the Regional Council members and the project staff. The second series of meetings will be devoted to the
development of recommendations concerning manpower development, education and training with reference to the economic and industrial plans for the State and its regional areas. The resulting reports of the 8 Regional Councils will be consolidated into a single report for presentation for discussion to the State Council. The State Council will then submit its report and recommendations to the State Department of Education and the Governor's Office.

Implementation of Recommendations

Whether or not any action will be taken by the State Department of Education, other concerned State governmental agencies, and regional groups and local communities as the result of the reports of the State Council and Regional Councils will depend on the continuing life of the Councils and interest of the Council members. This problem is now being discussed by the project staff, all of whom expect to conclude their involvement with the project at the end of the year. (This may not be possible for the representative of the State Department of Education. He has, of course, full-time responsibilities to a demanding job, and has had to somehow find time for his current participation in the evaluation project.)

Unfortunately the project was not staffed to provide
such detailed assistance, despite the fact we recognized from the very initiation of the project, that such demands might be made upon us. We had been overly optimistic that, somehow, additional staff could be assigned as needed, from both IREC and the State Department of Education. Lacking this staff, it is quite possible that we will not meet the established schedules for completion of the various phases of the project, much less provide for the continuing functioning of the State and Regional Councils.

Other problems which have arisen due to lack of full-time "on-the-scene" staff have resulted in compromises as to both intensity and extensiveness of the project. As a possible solution to this problem of inadequate staff, it is planned to request the Research Coordinating Unit for Vocational Education, attached to the University of Arkansas, and the Vocational Education Division of the University of Arkansas, to become involved in this project. The R.C.U. has already developed forms and procedures to be used in a continuing and systematic follow-up of dropouts and graduates of occupational education projects; and the Vocational Education Division is supervising the evaluation of six Arkansas high schools as part of the Michigan State University project. If they can be persuaded to provide staff assistance for continuing research, with Department of Education Staff at the State and Regional levels responsible for
staffing and coordination of the work of the Advisory Councils as originally conceived and planned, we believe it can be demonstrated that the use of industry advisory committees can be an effective technique instrumentality, as well as a strategy, for both evaluating and strengthening the role of vocational and technical education vis-a-vis the economy of a State and the development of its manpower resources.
A primary purpose of the program is to evaluate vocational education programs in relation to the economic development of Arkansas. This method of evaluation, in itself, is a new and rather unique approach. Therefore, it is hoped that the plan will become a pattern for other states to use.

Because of the comprehensiveness of the program there are several phases which have been or will be initiated; briefly, they are as follows:

1. Student Follow-up Survey: This involves a survey of all students enrolled in vocational-technical schools since 1961. The objectives of this phase are to investigate to what extent the students have used their training; their success after leaving school; reasons for the selection of specific courses; and the extent of dropouts and reasons for them. This aspect of the study is being conducted by the IREC in cooperation with the State Department of Education.

2. Critical Manpower Needs Survey: This phase involves the determination of present critical skill shortages and anticipated manpower requirements over the next twelve months. The job vacancy method will be used to determine skill shortages along with the unfilled job openings technique which is based on Employment Security Division data. This phase of the study is being conducted by the IREC in cooperation with the State Employment Service. It is hoped that the estimates of current shortages will assist the Regional Manpower Advisory Councils and vocational educators plan curriculum for the immediate future.

3. Long-Range Projections of Manpower Needs: The IREC is presently engaged in projections of employment for wage and salary workers only by two-digit SIC establishment to 1980 with intermediate estimates for 1970 and 1975. The projections are being made for the State and the State's five economic regions. In addition, projections will be made of employment by occupation for all jobs by DOT three-digit occupational groups to 1980 with intermediate estimates for 1970 and 1975. The purpose of these projections is to assist the advisory councils and vocational-technical educators in long-range curriculum planning.

4. Review and Evaluation of Vocational-Technical Programs: This is one of the most important phases of the program. The evaluation will be conducted by one statewide and eight regional manpower advisory councils (see attached map) which are composed of representatives from industry, government, and business. The results of the three phases mentioned above will be presented to the advisory councils for their review in evaluation of existing programs, and in establishing plans and priorities for future
Two additional areas of investigation which will be provided the advisory councils are described below:

(5) Estimates of Labor Surplus: Estimates of labor surplus and its components will be made by the IREC in cooperation with the Arkansas ESD for each of the eight regions. This analysis will be based on secondary data sources and will provide estimates of the number of persons unemployed, underemployed, and those not in the labor force (underparticipants) for each of the eight regions.

(6) Labor Availability. Household surveys will be conducted in selected areas in the State to determine the number of persons interested in applying for new jobs which are being created by new and expanding industry. The survey will also ascertain the number of persons who are interested in additional educational and training programs which may qualify them for better jobs. In addition to obtaining the names and addresses of such individuals, the survey will provide both personal and work history characteristics for those persons interested in training and employment.
APPENDIX B

FUNCTIONS OF THE REGIONAL ADVISORY COUNCILS

The following are some of the areas in which the councils will be expected to work, however, they are not limited to these areas:

1. Review the findings of the follow-up study of students and make recommendations for discontinuing or expanding programs.

2. Review the projections of manpower needs and recommend priorities for future programs.

3. Regional Advisory Councils to make quantitative and qualitative evaluations of existing vocational-technical education programs and report findings and recommendations to the State Advisory Council.

4. Prepare recommendations for pre-vocational training and guidance to orient students to the world of work in skilled, technical and industrial occupations.

5. Make recommendations for new approaches for meeting the total vocational education needs of Arkansas such as mobile facilities; alternating training on the job and in the school; specific training for new and expanding industries; etc.

6. Recommend procedures for coordination of training programs with other agencies and at all levels of public education such as basic adult education; high school equivalency; high school, post high school, and adult vocational-technical education programs.
Guideline Questionnaire

Name of Regional Council Member: ____________________________________________________
Representing: ____________________________________________________ Regional Council
Name and Address of School or Facility Visited: _______________________________________
Type of Institution and Grade Levels of Instruction: __________________________________
Date of Visit(s): ___________________________________________________________________
Names and Titles of School Officials Visited: __________________________________________

A. General Questions for All Schools and Programs

(Note: For ease of reference, "school" is used to mean any type of school or training institution, facility or program offering occupational education and training.)

1. What are the general objectives of the occupational education program of the school?

2. How do these objectives tie-in with occupational education offerings in other schools in the area--at lower grade levels, as well as upper grade levels? How do the objectives tie-in with on-the-job training provided by employers to new employees?

3. Does the school act as an employer in providing cooperative work-study experience for students, e.g., office work, school bus maintenance, etc.?

4. To what extent does the school utilize community employers to provide cooperative work-study experiences for its students? What are the problems in expanding such programs?

5. To what extent are employers, government agencies, business groups and economic developers consulted in developing new occupational education programs or in discontinuing or revising presently offered programs? Are any studies and reports available to substantiate the need for additional new programs?

6. Could the school building and facilities be scheduled for more program offerings and larger student enrollments than at present?

7. What kind of remedial basic education and training programs are offered by the school for school dropouts and disadvantaged adults? Is there a need for expanding such programs in terms of numbers of people in the area who could benefit from remedial basic education and training? If so, should state schools or local school districts provide this type of program?

8. Is the school offering skill-upgrading programs for employed youth and adults? Is there a need for expanding such programs, and on what basis has this need been determined?
9. Are there any employers in the area who claim they could expand their operations but are stopped from doing so because of lack of trained personnel? If so, what kinds of personnel are needed, and what is the school planning to do about the situation?

10. How adequate are the vocational counseling and job placement services of the school in terms of assigned personnel, students served, literature distributed, special courses, visual aids used, field trips to offices and plants, job development for students and graduates, and follow-up after the job placement?

11. Could the school improve and expand its occupational education offerings if it were part of a consolidated school district whereby local tax funds could be used in financing its program?

12. What proportion of the graduates of the school who do not go on to higher education obtain jobs and continue living in the area served by the school?

13. What programs exist for keeping instructors in occupational education programs up-to-date on new materials, processes and technology in their special fields?

14. Are any short-term special programs offered by the school for special industry or business groups? If so, how are they financed?

15. How many of the school's graduates go on to higher education? Of those who do, how many complete their courses?

B. Questions for Secondary School Level Programs

(Grades 7 through 12)

1. Are industry-oriented courses offered, such as industrial arts, to all students in the school so that they may experience and explore a variety of possible job and career opportunities and to develop appropriate world-of-work attitudes? If not, could the vocational agriculture shop, home economics, business education and distributive education programs be used for the purpose of providing all the students this variety of experiences?

2. Are the students in vocational agriculture programs provided any training for off-farm work?

3. Are the students in the home economics program provided any basic training for such fields as cosmetology, the health services, food processing, clothing manufacturing, upholstery industry, etc.?

4. Do the chemistry, physics and mathematics teachers provide instructional and experimental projects which relate to specific occupational education programs of the school and/or to the industries and businesses in the community, e.g., the science of the air conditioning industry, the mathematics of computer technology, etc.
### C. THE STUDENTS

(Note: Several students should be selected at random and interviewed by evaluators)

<table>
<thead>
<tr>
<th></th>
<th>Fully</th>
<th>Large Extent</th>
<th>Partial</th>
<th>Minimal</th>
<th>Not at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The students in the shop are clothed as they would be expected to dress on-the-job in industry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. All the students elected the course.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. All the students were selected on the basis of aptitude and interest in the program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. All the students are provided individual and group counseling as to the variety of job opportunities - locally, regionally and nationally - which may be available to them after graduation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. All the students are aware of the skill levels they will attain in terms of entry-level jobs, working conditions and wages in industry for the occupations in which instruction is being provided.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Individual records of progress are maintained for each student and he is aware of his progress at all times.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. All students belong to one or more of the national clubs dealing with industry or business.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Follow-up records are maintained on those students who have either dropped out or graduated from the program, and are used in helping revise course content, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. All students are aware of the need for and availability of continuing education and skill improvement programs after completing the course.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. All students qualified for and desiring to enroll in the course are able to do so without regard to personal or family financial difficulties or transportation problems.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Graduates of program receive higher wages or salaries upon initial employment than do new employees on the same job who did not graduate from the school course or program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Review records maintained by instructor or department head.*
C. THE STUDENTS (continued)

<table>
<thead>
<tr>
<th></th>
<th>Fully</th>
<th>Large Extent</th>
<th>Partial</th>
<th>Minimal</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>All students are provided the opportunity to acquire some skills on all the equipment in the shop.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>All students are provided experiences and evaluated for performance in:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. production assembly for a reasonably long period of time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. quality-control techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. supervisory and production control record responsibilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. being interviewed for a job</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Nationally or statewide standardized achievement tests are used, to the extent available, for evaluating student performance and knowledge acquired in the occupational field.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Special remedial instruction is provided all students in need of such assistance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>All students desiring to do so, are provided the opportunity to change their course or program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>All students are provided instruction concerning employer-employee relationships and fellow-worker relationships.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Employers considering hiring a student or graduate are provided information as to the student's performance while in school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>All students are provided an opportunity for paid cooperative school-work experience.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMMENTS: (Note extent to which any inadequacies have been reported to the school administration and/or advisory committee, and action taken or planned.) Use reverse side for comments.

*: Review records maintained by instructor or department head.
A Three-Year Program Plan for Your Advisory Committee

SAMUEL M. BURT, Chairman AIA Industry Cooperation Committee

One of the most significant strategies for involving members of industry-education advisory committees in the problems and programs of vocational education is to have them plan their activities and services for several years ahead.

The following checklist has been designed for a three-year plan, but it can easily be adapted to a two- or five-year period. Your needs will dictate the time span.

The importance of this checklist is that it spells out more than 30 activities and services from which the advisory committee may choose. It can serve also as a basic document for describing the responsibilities of industry-education advisory committees in the preliminary stages of establishing such committees.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Encouraging young people (and parents) to consider vocational and technical education and training through visits to &quot;demonstration&quot; schools, visits to business and industry, speeches to civic clubs, career day meetings, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Assisting in the screening of students applying for admission to the courses.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Participating in the development of attitude tests for selection of students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Providing information concerning desirable aptitudes and the education and experience backgrounds of applicants for entry-level jobs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Arranging plant or field trip visits for students and counselors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Providing vocational guidance literature to teachers, counselors, and students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Assisting and participating in surveys of local industry manpower needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Assisting in the development of aptitude tests, achievement tests, and certification and licensing tests related to initial employment of graduates.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Planning students in part-time work during school year or summer vacations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assisting in the preparation and review of budget requests for laboratory and shop equipment and supplies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Assisting in the development and review of course content to assure its currency in meeting the changing skill and knowledge needs of the industry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Evaluating physical conditions, adequacy of equipment, and layout of laboratory or shop.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Obtaining needed school equipment and supplies on loan, as gifts, or at special prices.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Assisting in the establishment of standards of proficiency to be met by students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Assisting in the development of school policy concerning the kinds and volume of production work or &quot;live jobs&quot; to be produced by students so that this work will be of instructional value in the educational program.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Establishing and maintaining a library of visual aids, magazines, and books concerning industry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Assisting in the development of special educational and training programs conducted with funds made available by the Manpower Development and Training Act, the Economic Opportunity Act, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Assisting in the development of evening-school skill improvement and technical courses for employed plant personnel.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Assisting in the development of related courses for apprenticeship and on-the-job training.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Arranging plant or field trip visits for teachers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Providing sample kits of raw materials, finished products, charts, and posters, etc., for exhibit and instructional purposes in classrooms and shops.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Assisting in the establishment of student fees and charges for courses and programs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Teacher Assistance

1. Providing funds to help local teachers attend regional and national meetings of industry and teacher organizations.

(Continued on the next page)
### Teacher Assistance—continued

2. Arranging meetings of teachers to establish cooperative relationships between the schools and industry.

3. Arranging summer employment for teachers.

4. Arranging in the establishment of teacher qualification requirements.

5. Coordinating printing and inserting and updating training programs for teachers.

6. Arranging the utilization of resources from industry and/or regular teachers.

7. Insisting that the student be given special assistance as may be necessary to obtain needed information.

8. Paying industry organization membership dues for teachers.

9. Providing awards and prizes to outstanding teachers.

### D. Student Recognition

1. Providing scholarships and other financial assistance for outstanding graduates who wish to continue their education and training.

2. Providing prizes to outstanding students.

### E. Public Relations

1. Providing speakers to address trade and civic groups concerning the industry's education and training program in the schools.

2. Filling newsletters concerning school programs in magazines published for specific industry groups.

3. Providing newsletters concerning the school program to local newspapers.

4. Attending meetings in support of vocational and technical education which may be called by local and state school officials, boards, and legislative groups.

5. Participating in radio and television programs designed in "sell" vocational and technical education to the public.

6. Contributing funds to advertise specific school occupational education and training programs.

7. Advising employees and their families concerning school programs by placing information on bulletin boards, putting news-stories in company bulletins, and inserting enclosures in pay envelopes.

---

**AMERICAN VOCATIONAL JOURNAL**