

DOCUMENT RESUME

ED 079 429

TM 003 034

AUTHOR Norton, Daniel P.; Watley, Dcnivan J.
TITLE The Efficiency and Efficacy of the Evaluation Practices of the Illinois Division of Vocational and Technical Education--Final Report.
INSTITUTION Educational Testing Service, Evanston, Ill.
SPONS AGENCY Illinois State Advisory Council on Vocational Education, Springfield.
REPORT NO ETS-PR-72-29
PUB DATE 21 Dec 72
NOTE 116p.
EDRS PRICE MF-\$0.65 HC-\$6.58
DESCRIPTORS *Evaluation Methods; Evaluation Techniques; *Feasibility Studies; Interviews; *Program Evaluation; Questionnaires; *Research Methodology; Sampling; *Systems Development; Technical Education; Vocational Education

ABSTRACT

A study of the "efficiency and efficacy" of evaluation practices of the Illinois Division of Vocational and Technical Education as conducted by Educational Testing Service is reported on. The study was directed toward understanding how evaluation practices of the Division, with largest emphasis upon the performance of the Three Phase System used to conduct statewide evaluation of occupational programs, might be improved over successive months and years. Analysis of the System was conducted by use of several methodologies: (1) interviews of Division personnel, (2) sampling of agencies for study, (3) collection of data from record systems of the Division, (4) submission of questionnaires to planners and team members, and (5) independent study of trends in statewide evaluation. Outcomes of the Three Phase System suggest it is well received by local education agencies and by the team members who have contributed to it. However, it has numerous deficiencies most of which arise from the fact that it does not emphasize or produce product information. Among the favorable features of the System is its self-reactance. Long and short range recommendations for changes in system planning and functioning conclude this report. (Author/CK)

ED 079429

PR-72-29

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE 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 NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

THE EFFICIENCY AND EFFICACY OF THE EVALUATION
PRACTICES OF THE ILLINOIS DIVISION OF VOCATIONAL
AND TECHNICAL EDUCATION--FINAL REPORT

Daniel P. Norton
Donivan J. Watley

Prepared for STATE OF ILLINOIS
ADVISORY COUNCIL ON VOCATIONAL EDUCATION



EDUCATIONAL TESTING SERVICE
PRINCETON, NEW JERSEY

ED 079429

THE EFFICIENCY AND EFFICACY OF EVALUATION PRACTICES
OF THE ILLINOIS DIVISION OF VOCATIONAL AND
TECHNICAL EDUCATION--FINAL REPORT

Daniel P. Norton
Donivan J. Watley

Prepared for
STATE OF ILLINOIS
ADVISORY COUNCIL ON VOCATIONAL EDUCATION

EDUCATIONAL TESTING SERVICE

Evanston, Illinois

December 21, 1972

Acknowledgments

This document is the product of the cooperation and efforts of many people. We are most indebted to Dr. James Galloway, Coordinator of the Program Approval and Evaluation Unit of the Division of Vocational and Technical Education, through whose kind and full assistance the information on which this report is based was assembled. Members of his support staff and other members of the Division willingly made available all records we requested and devoted many hours to describing their practices to us. Dr. Tim Wentling of the University of Illinois ably provided basic data and described support activities under his direction.

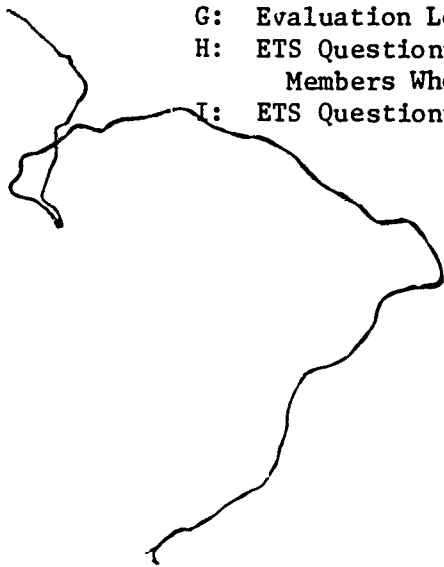
Dr. Gordon Law of Rutgers University contributed useful information about evaluation practices in other states. Dr. Charles Hicklin of Illinois State University discussed and made helpful suggestions for the design of the study. Dr. Garlie Forehand, formerly on sabbatical leave with Educational Testing Service but now returned to Carnegie-Mellon University, made very useful suggestions that led to more effective ways of describing the information needs of the Division.

Dr. Benjamin Shimberg, Dr. Raymond Wasdyke, and Dr. Charles Loch of the Princeton, New Jersey Office of ETS, made direct contributions to the preparation of this document as did other members of our Evanston Office. Members of the Advisory Council, Dr. William Nagel, and Dr. Robert Gray of its executive staff, also contributed useful suggestions and advice. We are grateful to all of these people and to the many other persons who provided us with information along the way.

CONTENTS

	Page
Acknowledgements.	iii
Tables and Figures.	vii
ABSTRACT.	1
INTRODUCTION.	3
Background of Study	3
Illinois Division of Vocational and Technical Education	3
Organization	3
Evaluation System.	4
Description of Three Phase System	7
Phase I: Development of Local Plans.	7
Phase II: Approval of Local Plans	9
Phase III: On-Site Visitations	10
Internal Evaluation of the Three Phase System.	12
INFORMATION NEEDS OF THE DIVISION OF VOCATIONAL AND TECHNICAL EDUCATION	13
Users of Division Information	13
Sources of Division Goals and Objectives.	14
Externally Initiated Objectives.	14
Internally Initiated Objectives.	17
Summary Information Requirements.	19
Definition of Terms.	19
Information Needs.	21
METHODOLOGY	23
Sampling of Educational Agencies.	23
Questionnaire to Preparers of Plans	24
Questionnaire to Visiting Team Members.	25
Analysis of Evaluation Report Data.	25
Fiscal Audit Outcome Analysis	26
Study of Trends in Statewide Evaluation	27
Miscellaneous Studies	27
OUTCOMES.	29
Analysis of the Three Phase System.	29
Phase I: Development of Local Plans.	29
Phase II: Approval of Local Plans	34
Phase III: On-Site Visitations	39
Distances Team Leaders and Members.	39
Lived from Agencies Visited	
Analysis of Evaluation Report Profile Data.	41

	Page
Correlation Analyses	41
Variance Analyses	46
Profile Rating Questionnaire Responses Analysis . .	47
Responses to Items in the Planners Questionnaire. .	49
Related Studies.	51
Fiscal Audit Analysis	51
Occupational Information Programs (K-8) Analysis. . .	52
New Program, Initiation Analysis.	53
Self-Reactance of the Three Phase System.	53
Effectiveness of the Three Phase System	55
in Meeting Information Needs	
Evaluation in Other States	62
Summary.	68
 RECOMMENDATIONS	 73
Long Range Recommendations.	75
Short Range Recommendations	80
Summary	85
 APPENDICES.	 87
A: Sequential Development of the Three Phase System.	89
for Statewide Evaluation of Occupational Education Programs	
B: On-Site Evaluation Instrument	91
C: Work Sheet.	94
D: Status of Plan Report	96
E: Master Control-Local Plans.	97
F: School and Community Demographic Data	98
G: Evaluation Log.	100
H: ETS Questionnaire on Profile Ratings for Team	101
Members Who Visited Educational Agencies in 1971-72	
I: ETS Questionnaire for Program Planners.	106



Tables and Figures

TABLES

Table No.		Page
1.	Approval Status of Plans as of September 8, 1972 . . .	35
2.	Linear Miles Between Home or Work Locations of Team Members and the Agencies they visited	40
3.	Mean (.) and Standard Deviations (—) Composite. . . Ratings for 68 Agencies Visited in 1971-72	42
4.	Correlations Among Eight Composite Ratings, Team Size and Ability for 68 Agencies	44
5.	Relationships Between Three Phase System Operations. . and External and Internal Information Requirements of DVTE	56, 57

FIGURES

Figure No.		Page
A.	Organization Chart Division of Vocational and Technical Education	5
B.	Schematic of Three Phase System for. Statewide Evaluation of Occupational Education Programs; Relation of Division and Local Personnel	8
C.	Example of Bar Graph in Evaluation Report.	26

ABSTRACT

The State of Illinois Advisory Council on Vocational Education is charged by federal legislation with the responsibility for conducting an independent evaluation of the effectiveness of vocational education programs, services, and activities within the state. Specifically, this responsibility entails an intensive study of some of the evaluation efforts of the Division of Vocational and Technical Education.

This document reports a study of the "efficiency and efficacy" of evaluation practices of the Illinois Division of Vocational and Technical Education as conducted by Educational Testing Service on behalf of the Advisory Council. Readers wishing to first learn about its findings and recommendations should turn directly to the sections, Outcomes and Recommendations, on pages 29 and 73, respectively. The preceding sections describe the context in which the Division functions, the Three Phase System, and the methodology of the study.

The study was directed toward understanding how evaluation practices of the Division, with largest emphasis upon the performance of the Three Phase System used to conduct statewide evaluation of occupational programs, might be improved over successive months and years. The three phases of the study, which overlapped in their conduct, were designed to answer these questions: (1) What information should evaluation provide? (2) How well are current evaluation practices meeting these information needs? and (3) How might evaluation practices be improved?

Analysis of the System was conducted by use of several methodologies: (1) interviews of Division personnel, (2) sampling of agencies for study, (3) collection of data from record systems of the Division,

(4) submission of questionnaires to planners and team members, and (5) independent study of trends in statewide evaluation.

Outcomes of the study of the Three Phase System suggest it is well received by local education agencies and by the team members who have contributed to it. However, it has numerous deficiencies most of which arise from the fact that it does not emphasize or produce product information. The performances of graduates of occupational programs are not assessed; without this information, other features of the System are restricted in their effectiveness. Also, the System does not provide a comprehensive framework for total Division management.

Among the favorable features of the System is its self-reactance. That is, it has been set up with the intention that information needed to improve it can be regularly collected and applied. By using this valuable feature, it must be hoped the Three Phase System can be changed in the direction of improved output assessment. Long and short range recommendations for changes in System planning and functioning conclude this report.

INTRODUCTION

Background of Study

Vocational and technical education programs are an integral part of the total education package that taxpayers are asked to support. Therefore, these programs must be relevant to needs and the use of program funds must be accounted for. To accomplish this task, the State of Illinois Advisory Council on Vocational Education is charged by federal legislation with responsibility for conducting an independent evaluation of the effectiveness of vocational education programs, services, and activities within the state. Specifically, this responsibility entails intensive study of the evaluation efforts of the Illinois Division of Vocational and Technical Education (DVTE).

This study was funded by the Illinois Advisory Council. It is an independent investigation of the evaluation practices of the DVTE, having a primary focus on the performance of the Three Phase System for Statewide Evaluation of Occupational Education Programs administered by the Program Approval and Evaluation Unit of the Division. The Advisory Council requested that it be furnished with data and action recommendations concerning the "efficiency and efficacy" of the Division's range of evaluation activities. It was particularly interested in determining if the evaluative efforts of the Division have been appropriate and if they have related well to the needs of its programs and their sponsors.

Illinois Division of Vocational and Technical Education

Organization

The Division is organized under the Board of Vocational Education and Rehabilitation through which it is related to the Governor's Advisory Council.

It possesses a director and two assistant directors having responsibility for the performance of eight operational units. An Administrative Planning Council which is made up of the eight Unit Coordinators relates to the Office of the Director. (See Figure A.)

The Superintendent of Public Instruction is designated by statute to be the Executive Officer for work of the Division:

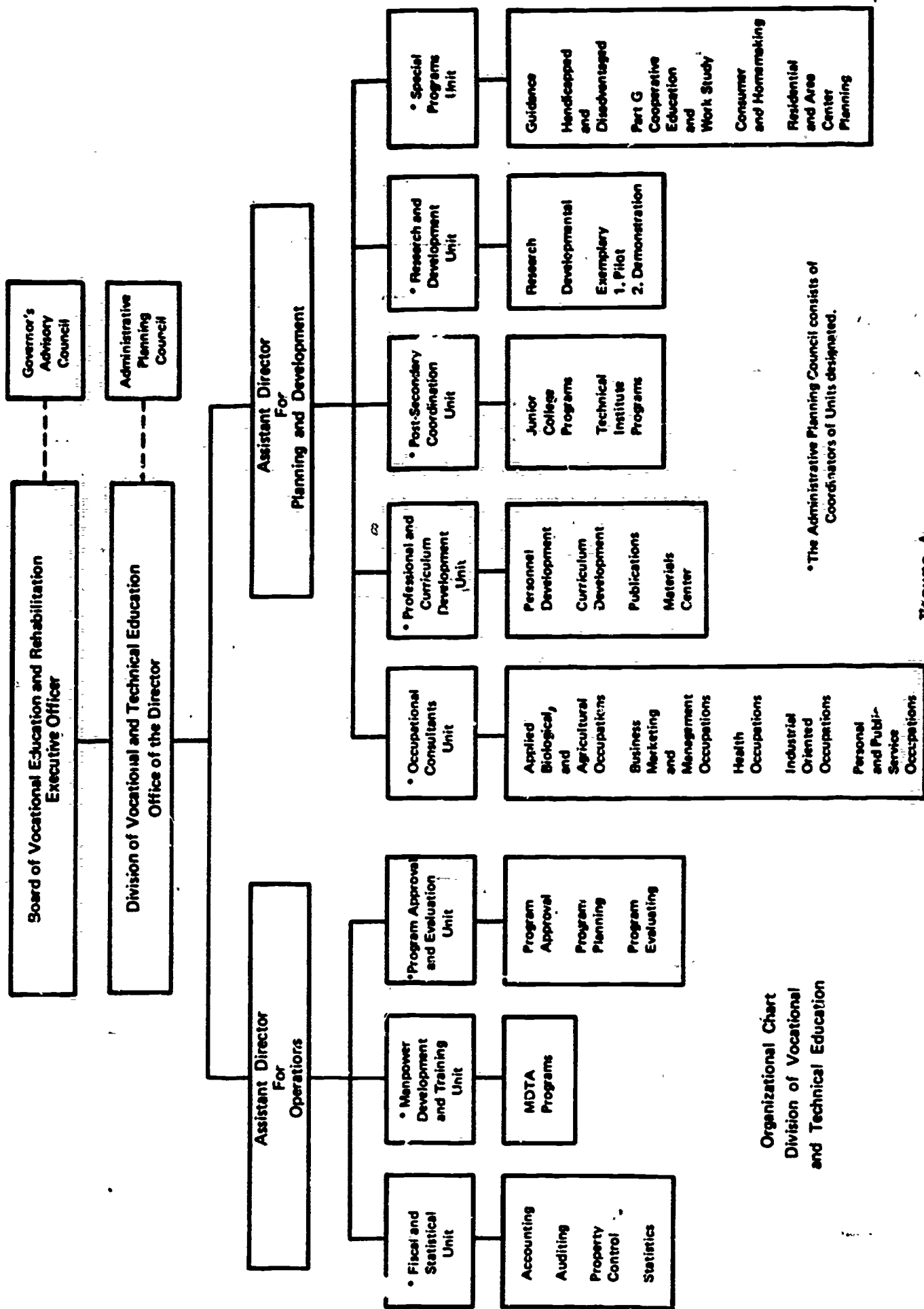
"The Superintendent of Public Instruction shall be the Executive Officer for all of its work pertaining to Vocational and Technical Education, with responsibility to represent the Board in the administration of its plans and programs for vocational and technical education." (Chap. 122, Sec. 695 § 2, Illinois Revised Statutes, 1967.)

Evaluation System

The 1960's was a decade of great emphasis on vocational education. Particularly important toward the general upgrading of this nation's vocational skills was the Vocational Education Act of 1963 and the subsequent Amendments of 1968. The need for state and local evaluation for the purpose of determining whether the intentions of the legislature are met was specifically detailed in the 1968 Amendments. In the attempt to comply with the instructions that evaluation of programs be accomplished, the Illinois Division of Vocational and Technical Education developed a comprehensive plan referred to as the Three Phase System for Statewide Evaluation of Occupational Educational Programs (Bulletin 35-971).¹

The coordinated state system for evaluation of vocational programs that has been developed has incorporated within it the important tasks of accountability, planning, and improvement of programs; the goals of this system are as follows:

¹Three Phase System for Statewide Evaluation of Occupational Education Programs. Springfield, Illinois: Board of Vocational Education and Rehabilitation, Division of Vocational and Technical Education, 1971.



Organizational Chart
Division of Vocational
and Technical Education

*The Administrative Planning Council consists of
Coordinators of Units designated.

Figure A

1. to promote and assist with development of quality occupational education programs at the local level;
2. to provide the Division of Vocational and Technical Education with data upon which better statewide planning of occupational education programs can be based; and
3. to help assure accountability of Federal and State funds allocated to local occupational education programs.²

Following from these goals are established objectives for occupational education in Illinois. A number of first and second priority objectives have been established.

The purpose of the Three Phase System of Evaluation was to determine the extent to which the objectives have been and are being met. The functions of each of the phases are:

- Phase I Utilization of self-evaluation in program planning by the local district culminating in the development of a One and Five Year Plan.
- Phase II Program approval by staff of the Illinois Division of Vocational and Technical Education.
- Phase III External evaluation by a visiting team to develop a profile of the local program with conclusions and recommendations to the local district.

The State Plan for the Administration of Vocational and Technical Education in Illinois - 1972, prepared by the Division of Vocational and Technical Education in cooperation with several other agencies, indicates that the Division's top priority during Fiscal Year 1972 was to be full implementation of Phase III.³ The independent evaluation activities of the Educational Testing Service was directed toward a consideration of the efficiency and efficacy of the Illinois Evaluation system as it relates to this document.

²Ibid, p. 2.

³A State Plan for the Administration of Vocational and Technical Education. Springfield, Illinois: Board of Vocational Education and Rehabilitation, Division of Vocational and Technical Education, 1971.

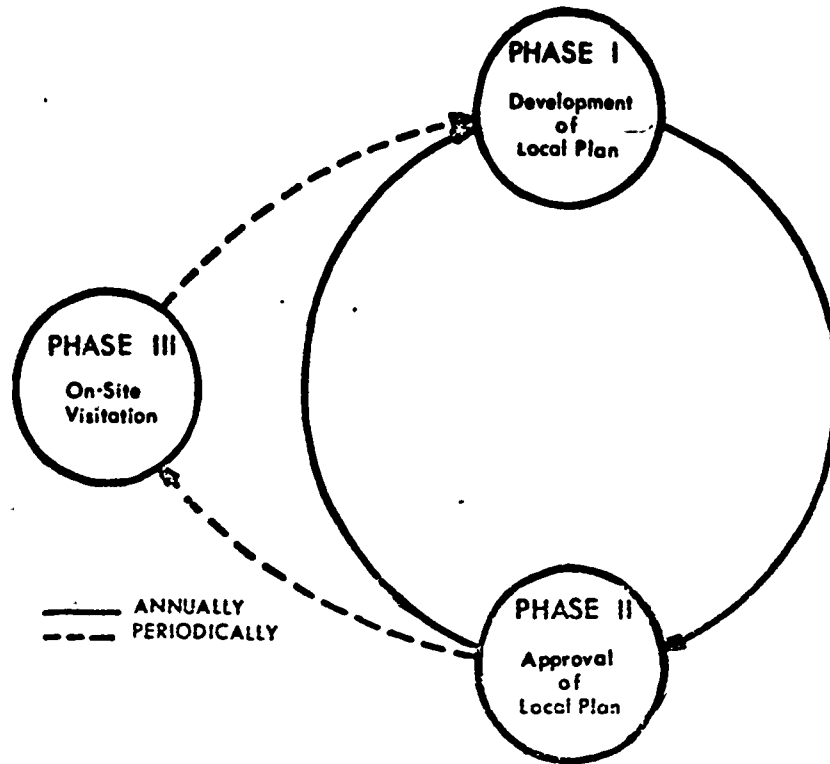
Description of the Three Phase System

Phases I and II are annual processes while Phase III occurs every two to five years or as warranted. The following sections provide a brief description of the forms, procedures, and schedules of the Three Phase System. This description is intended to enable persons not familiar with it to understand (1) how, during Phase I, people in local education agencies (LEA's) received descriptions of the System and guidelines for the preparation of planning documents; (2) how, during Phase II, LEA plans were reviewed for approval; (3) how, during Phase III, site visits were conducted; and (4) how the program planning and evaluation unit undertook to evaluate the effectiveness of its system. Figure B, which follows, presents a schematic of the Three Phase System together with a figure showing the relationship of Division and local personnel as the System is implemented.

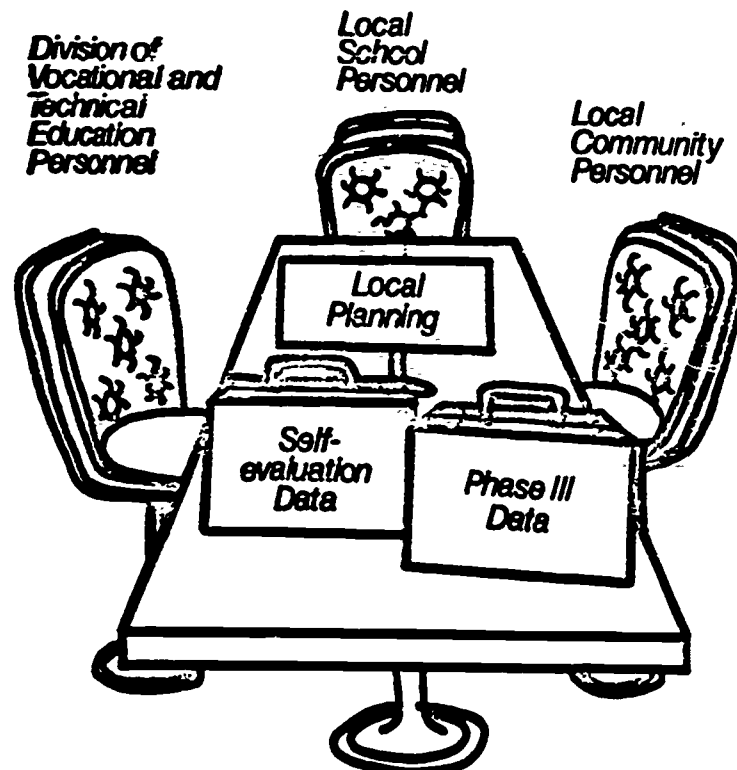
Phase I: Development of Local Plans

The Illinois Three Phase System, as it was used during Fiscal Year 1972, was developed over several years. Some of the documents that are now essential parts of the System (on-site evaluation instruments, for instance) were systematically developed from draft devices through field trials, modification, additional trials and further revisions. Others were not formally developed in the same way, but all have gradually been woven together until, at present, they link with each other in many ways. During Phase I, the LEA must be able to read and understand, or receive help to understand, two basic documents. One is titled Guidelines and Format for Preparing Local District One and Five Year Plan for Vocational and Technical Education.⁴ This document includes four pages of narrative intended to help the writers of plans and is followed by ten pages of forms to be completed by the agency as part of its application process.

⁴Guidelines and Format Planning for Preparing Local District One and Five Year Plan for Vocational and Technical Education, Bulletin No. 2-971, Springfield: State of Illinois, Division of Vocational and Technical Education.



Schematic of Three Phase System for Statewide Evaluation of Occupational Education Programs



Phase I: Relationship of Division and Local Personnel

Figure B

The second document of importance for planning reference is titled Criteria for Program Approval and Financial Support.⁵ This fifteen page document describes nine types of general provisions (A-I) to be met for all levels of planning and also describes the five types of instructional programs (A-E) for which support may be granted.* It gives minimum requirements for personnel and tells how funds are allocated. Fund allocations go toward basic claims and for six additional factors that augment basic claims. The additional factors are:

- Factor I - Relative Ability to Pay
- Factor II - Provisions for Educating Disadvantaged Students
- Factor III - Special Organizations
- Factor IV - Initial Programs
- Factor V - Manpower Priorities
- Factor VI - Programs for Handicapped

Phase I and its later companion phases are described in a document titled Three Phase System for Statewide Evaluation of Occupational Programs.⁶ This 30-page document enables its readers to place the planning phase in its intended relationship with the approval and on-site visitation phases. It provides, with its emphasis on visitation, a very useful orientation for those having the task of developing LEA plans.

Phase II: Approval of Local Plans

The local plan, when it has been approved by the district and its local governing board, is transmitted through the Superintendent of Educational Service Region or the Illinois Junior College Board to the Program Approval and

⁵Criteria for Program Approval and Financial Support, Bulletin No. 4-171-2 Springfield: State of Illinois, Division of Vocational and Technical Education.

*Division Bulletins having the same Bulletin Number do not always have the same contents. Small changes in the contents of bulletins are made at regular intervals without changes being made in the numbering system or the insertion of dates whereby their users can readily distinguish between them.

⁶Three Phase System for Statewide Evaluation of Occupational Education Programs, op. cit.

Evaluation Unit of the Division. This unit, with assistance from other persons, evaluates the Local Plan and recommends that it be given one of three approval levels: Fully Approved (A), Conditionally Approved (CA), and Not Approved (NA).

A large fraction of the work involved in reviewing local plans for approval is carried on by the eight regional directors employed by the Unit.

They are expected to follow a 5-step procedure when reviewing the Plan:

1. Look at the preceding year's Plan if there was one.
2. Read the site visitation evaluation report if there is one.
3. Read the new Plan.
4. Read the "suggested action" column in the evaluation report.
5. Indicate on the report the items that are met on the Work Sheet.

The Work Sheet is a two sided document having spaces in which to rate different characteristics of the Plan. It is divided into the same sections that must be completed for the submission of a Plan, but does not have categories for rating that require highly objective reading and review.

When the review process has been completed, a Status of Plan Report is prepared on which is recorded the approval status of the plan, the approval of courses within the plan, and review comments. This record, a copy of which is appended, becomes the official document for communication about Status of Plan between the Division and LEA's. A master control record for local plans is maintained in the Unit on which the approval status and other information are retained.*

Phase III: On-Site Visitations

Phase III is, in most respects, the critical core of the Three Phase System. Agencies receive an extensive description of it before they prepare their local plan and an extensive effort is made to assure that they will not

*See Appendix for examples of these forms.

fail to understand its importance.

Agencies to be visited are not selected on a purely random basis. After the selection criteria that are used at a given time have been applied, an agency to be visited is notified. This notification sets in motion a series of activities that culminate in the mailing of an evaluation report to the agency that has been visited. Agency staff members are oriented to the visitation process through use of a film strip specifically prepared for the purpose. Prior to visitation, they are asked to complete and transmit a School and Community Demographic Data Form for use by the visiting team. In addition, two questionnaire forms have been prepared for distribution to instructors, counselors, and school administrators (Professional Staff Form) and students (Student Form). These three documents are used to collect information about the agency to be visited. A report that summarizes data collected by the use of these forms is sent to team members prior to the evaluation visit.

Team members are selected through application of criteria reported in Bulletin 35-771 which calls for team sizes varying from 3 to 20 or more members; each team is intended, if it is large, to include educators, business, and industry personnel, and former occupational students. Single or joint team leaders coordinate the activities of the team on site.⁷

Two additional documents have been prepared for use by team members. They are (1) a Team Member Handbook for Evaluation⁸ containing an overview plus guidelines and spaces in which to make notes, and (2) an Evaluation Team Member Interview Handbook⁹ in which to record information assembled in the

⁷Ibid., p. 13 .

⁸Team Member Handbook for Evaluation. Springfield: State of Illinois, Board of Vocational Education and Rehabilitation.

⁹Evaluation Team Member Interview Handbook. Springfield: State of Illinois, Board of Vocational Education and Technical Education.

course of personal on-site interviewing.

Correspondence between the Division and agencies to be visited, records of completion of the visit, transmission of follow-up letters, and notation of the mailing of the completed report and submission of travel vouchers for team leaders are maintained on an Evaluation Log card in the Program Planning and Evaluation Unit.

Internal Evaluation of the Three Phase System

After an agency has been visited, four instruments, each of which contains from 21 to 41 items, are used to evaluate the System itself. They are designed for distribution to (1) teachers, (2) administrators, (3) team leaders, and (4) team members. Responses to the items are, when received, processed for use in the modification of the Three Phase System itself and for inclusion in the composite evaluation report prepared by the Unit on behalf of the Division.¹⁰

¹⁰The first report prepared as a result of data collected from the Three Phase Evaluation System is titled Composite Evaluation Report for Occupational Education in the State of Illinois, Fiscal Year 1972.

INFORMATION NEEDS OF THE DIVISION OF VOCATIONAL AND TECHNICAL EDUCATION

Users of Division Information

The Illinois Division of Vocational and Technical Education annually prepares two major documents for external audiences. One is a composite of information assembled on forms provided by the Department of Health, Education and Welfare; the second is an annual descriptive report of Vocational Education in Illinois which is submitted to the United State Office of Education. The latter document tends also to be distributed in an authoritative summary for use by the Governor, the Board of Vocational Education and Rehabilitation of the State of Illinois, and other agencies and individuals.

The Division also produces many thousands of copies of other forms and reports among which are requests for proposals to do funded work, procedural guidelines for the submission of requests for funds and for reimbursement of programs, and program and project descriptions. Some reports are of general informational value; others are for use by very limited audiences.

An information system, or an evaluation system which is to generate information cannot be expected to provide all types of data for all types of reports and procedural documents. However, it must be anticipated that a comprehensive information or communication system might be expected to receive a large fraction of its needed input from a comprehensive evaluation system. Therefore, the information generated by the Program Approval and Evaluation Unit of the Division should be expected to provide a substantial amount of all information needed by the Division and its external audiences. It should closely link local education agencies with the Division and should, in addition to the information needed for use just within the Division, contribute substantially to the contents of reports for other audiences.

Sources of Division Goals and Objectives

Externally Initiated Objectives

The Division is, by its control and function, an agency that most often responds to goals and objectives set elsewhere rather than establishing its own goals. The Division must, if it is to receive Federal funds for disbursement, respond to Federal laws with specified plans and to plans submitted by local educational agencies. The Division must also respond to State of Illinois requirements for the funds its legislature provides, to the advice of formally organized advisory councils and to innumerable other documented, freshly written and spoken concerns for guidelines from educational agencies, groups, and individuals.

Some understanding of the responsive position of the Division can be acquired by casual reading of a recent document issued by the Office of the Superintendent of Public Instruction. Action Goals for the Seventies was printed in May 1972. It presents nine substantive goals for education in Illinois and dozens of "action objectives" which arose through the convening of state-wide regional conferences a year earlier. The author of a draft document stated:

The purpose of the Statewide Conference on Educational Goals and Priorities will be to draft a series of priority goal statements based upon the inputs of the six regional public hearings.¹

¹Olson, Thomas, A Proposal for Strategic Planning and Priority Goal Establishment for the Office of the Superintendent of Public Instruction (Draft copy), June 3, 1971.

Among the objectives that are listed in Action Goals for the Seventies² are several which pertain directly to the Board of Vocational Education and to the Division:

Statewide Governance

Action Objective #1:

By 1972, the Board of Vocational Education will be Placed Directly under the Office of the Superintendent of Public Instruction (p. 84).

Career Education

Action Objective #1:

By July 1973, a System of Financial Support for Career Education will be Developed Consistent with Other Educational Funding Practices in the State (p. 102).

Action Objective #8:

By 1976, a System for Training Career Education Professionals will Provide Sufficient Personnel to Meet the Career Education Objectives (p. 110).

Professional Qualifications and Certification

Action Objective #1:

By 1974, Certification will be Based on an Assessment of Satisfactory Classroom Performance Standards in Addition to Credit-Hour Requirements (p. 110).

Action Objective #4:

By 1975, in Cooperation with the Division of Vocational and Technical Education, Aid in the Development of Grades K-6 Career Awareness Programs, Grades 7-10 Career Exploration Programs, and Grades 10-12 Career Orientation Programs (p. 115).

²Action Goals for the Seventies, An Agenda for Illinois Education.
State of Illinois: Office of the Superintendent of Public Instruction,
May 1972.

Inclusion of the Board of Vocational Education within the Office of State Superintendent of Public Instruction would have profound implications for planning, organization, and the conduct of Division programs. Career Education programs constitute a large part of the operations of the Division. Requirements for statewide assessment of either teacher or student attainments, which are matters of both national and state concern at this time, could dramatically change needs for evaluation performance in the Division. Indeed, it is possible that student performance assessment would be easier to initiate for many program outcomes sought by the Division than for regular academic programs such as reading for which assessment is most often proposed.

The objectives listed in Action Goals for the Seventies have not, of course, become part of a statement of Division objectives. But other sets of objectives (and statements of purposes, goals, tasks, and benefits which are similar in content to objectives) are reflected in Division documents. The Vocational Education Amendments of 1968, which required the creation of national and state advisory Councils with prescribed duties and membership requirements, specified that a state plan for Vocational Education be prepared, and gave many requirements for its contents. The statutes of this law, while not stated with use of the term "objective" can be translated into statements of objectives for division and local education agencies.

Another source of external involvement in the statement of Division-concerned objectives was sponsored by the Division itself. Its Program Approval and Evaluation Unit selected, through contracts with individuals throughout the state who had contributed to the preparation of a bank of objectives, first and second priority objectives for referenced use by the Division. Thus these objectives, which reflect judgments and wishes of

external parties, have become incorporated as objectives for operational educational agencies and for the Division itself.

A recent addition to external influences on the formulation and use of objectives within the Division has arisen from the Vocational Education Amendments of 1968. The Advisory Council on Vocational Education for the State of Illinois has urged, through the submission of recommendations to the State Board, expansion of programs, improved surveillance of programs, services and activities, the addition of a requirement that schools provide for a system of placement followup, and support for adult programs.

Internally Initiated Objectives

A transition from external influences to internal influences on the statement of objectives can be discerned in a document nominally distributed "for discussion purposes only--Working Draft." The document is titled A Systems Approach for Management of Vocational Education; it was revised September 1, 1971. The document provides the best available summary of management information system thinking for the Division. It uses as its general purpose statement of the Division "suprasystem" the following statements from Public Law 90-576, Title I, Part A:

It is the purpose of the Division of Vocational and Technical Education to maintain, extend, and improve existing programs of Vocational Education and to develop new programs of Vocational Education, which are realistic in the light of actual or anticipated opportunities for gainful employment, and which are suited to the needs, interests, and ability of those benefiting from such training.³

³A Systems Approach for Management of Vocational Education. For Discussion Purposes Only--Working Draft, Revised September 1, 1971. State of Illinois, Board of Vocational Education & Rehabilitation, Division of Vocational and Technical Education.

Since divisions of vocational and technical education in all states must report to a common agency--the Federal Government, it should not be surprising that objectives selected for statewide use within Illinois would have much in common with objectives formulated in other states. The draft version of the Illinois State Plan for Fiscal Year 1973⁴ and that for the preceding year each contained statements of objectives prepared or selected and then assembled internally. The proposed Fiscal Year 1973 Plan contains a new section (Part II Annual and Long-Range Program Plan Provisions). In this section are brought together, in a format different from that used in 1972, numerous objectives used previously in New York and possibly other states together with new objectives prepared by the Division. The objectives in these documents include both statements calling for specific services to be provided by the Division (i.e. the provision of planning services to local education agencies) and statements calling for increased enrollments and student achievements.

The management information system document that was referred to previously contains a number of additional objectives, but these are objectives of the Division itself. That is, they call for the Division to plan, document, visit, maintain, and establish programs. These objectives, when taken in combination with those already referred to as having arisen either outside or within the Division, accumulate to produce a pool of many hundreds of objectives which can be considered as one tries to learn what the Division is attempting to accomplish. The number of objectives is too overwhelming to

⁴A Proposed State Plan for the Administration of Vocational and Technical Education in Illinois FY 1973. Final Draft March 30, 1972. State of Illinois Board of Vocational Education and Rehabilitation, Division of Vocational and Technical Education.

comprehend without summary. Some are very easy to understand; others are only partially understandable; and some use words in their formulation which make them almost unintelligible. It was from this pool of objectives and statements that information requirements for evaluation were assembled.

Summary Information Requirements

Definition of Terms

It is common and popular today to talk of information systems in education. The words used in discussions of this type and the words used to describe what educational programs are attempting to accomplish consistently do not have clear common meaning. The same words, for example "goal" and "objective", may have precisely interchanged meanings in two different educational agencies. To avoid imposing unnecessary terminological distinctions, the definitions of "purpose", "goal", "objective", and "activity" used in this document are, as much as possible, the same as those used by the Division in its preparation of the Management document. They follow:

PURPOSES

Purposes are not directed toward a specific time frame. Purposes represent a broad subjective review which is in turn utilized as a base upon which the total system is built. Purposes are arranged in a hierarchical structure displaying the broad highest level purposes and the more specific lower-level purposes that support them.

GOALS

Each unit (system) must forecast areas of endeavor within a specific time frame. The term "Goal" is used to define these areas of activity. By definition, a "Goal" is a written statement which indicates the duration and establishes the scope of a given number of related processes; it serves as a general statement to identify the nature of the activities to be performed.

OBJECTIVES

In contrast to the goal, an objective is a statement of specific behavior. An objective is a written statement describing how the goals will be accomplished and specified priority areas to be achieved in Fiscal Year 1972.

ACTIVITIES

Objectives are utilized to define the specific behavior necessary for accomplishing specific goals. At this point, activities must be defined to achieve the desired terminal behavior as stated in the objective. During this phase, management of physical resources requires being cognizant of program budgeting procedures as they related to purposes, objectives, and programs.⁵

This decision does, however, immediately produce a necessity for recognizing that words used to state "goals," "objectives," "activities," and "benefits" in the proposed State Plan for Fiscal Year 1973 were not formulated with these distinctions in mind. Indeed, statements in the Plan and in its predecessor document intermingle usages. For example, a goal to "encourage youth to be responsive to the welfare of others (p. 108, FY 73) and an objective to "support studies designed to provide local and state planners with valid information...." (p. 136, FY 73) are very similar. The intermingling of usage, while not unusual in complex planning documents, does make necessary constant recognition that the standardization of terms and meanings is a task that cannot be fully accomplished; tolerance for ambiguity in terms must be maintained.

⁵A Systems Approach for Management of Vocational Education. For Discussion Purposes Only--Working Draft, Revised September 1, 1971.

Information Needs

It became evident from the number of objectives listed in the documents reviewed that no feasible way existed to enter each individually into a statement of information needs. For the sake of clarity, a way of combining objectives was required. The method that has been adopted called for information needs statements to be derived from statements of goals, objectives, and so forth, present in the documents. Information needs statements were, furthermore, sought that would describe vocational education outcomes external to the Division (that is, within and about local education agencies) and those which might be needed to describe internal Division functioning.

Educational Testing Service staff members, after reviewing the materials available to them, sought to prepare a summary set of objectively stated information needs statements against which the performance of the Three Phase System could be compared. The preparation of this list constituted a response to the first of four investigative questions:

1. What information is needed?
2. Does the Three Phase System seek to give attention to the need?
3. How well is the System performing in response to the need?
4. What recommendations can be made to improve System performance?

The Three Phase System seeks to attend to all but perhaps the first of the listed summary needs--the one having concern for student skill attainment. Thus it appeared reasonable to attempt to focus on all fourteen information needs statements as guides for tracing the effectiveness of the Three Phase System.

The seven summary needs statements for information about the performance of individuals and agencies external to DVTE were:

1. What measurable job entry skills do students possess when they complete programs?
2. Are the numbers of agencies, programs and support experiences available to students increasing?
3. Are the numbers and qualifications of available teachers increasing?
4. Are educational agencies acquiring adequate information by which to plan improved instructional offerings?
5. Are guidance personnel and services being improved?
6. Are program enrollments increasing and student retention being improved?
7. Are students being assisted with placement in employment and followed up when they leave immediate control of their educational setting?

The six summary needs statements for information that are held by the Division were:

1. What priorities should be set for program development and the provision of services?
2. Are funds being correctly spent?
3. Is the evaluation System reactant; that is, does it possess features for self-correction?
4. Are agencies receiving consultation and support as required?
5. Are business, industry and labor being effectively involved in program development?
6. Do supplies of vocational education graduates meet the changing manpower demands in Illinois?

These questions and answers to them are later summarized in Table 5 on pages 56 and 57.

METHODOLOGY

ETS's analysis of the performance of the Three Phase System was initiated by careful study of the many documents prepared by DVTE, interviewing of persons engaged in the administration of the System, and study of records maintained by the Program Approval and Evaluation Unit at its Springfield offices and at the University of Illinois - Champaign where data processing and much organizational work was conducted. The elaborate nature of the System with its many forms, documents, and internal evaluation processes was generating far more information than could conceivably be exhaustively studied in the period of time available. Therefore, a sampling frame was first established to select limited quantities of data that could be examined carefully. Subsequent to preparation of the sampling frame, questionnaires were designed. A plan for the analysis of evaluation report data was structured, and supplementary studies were planned.

Sampling of Educational Agencies

Full scale implementation of the Three Phase System during Fiscal Year 1972 included the conduct of site visitations to a selected sample of the 600-plus Illinois agencies that submitted plans. Seventy-one agencies were visited during the year. All of these agencies, whether full data was available for them or not, were included in the basic sampling frame. At the time sampling was conducted, 113 agencies were tentatively scheduled for visitations during Fiscal Year 1973. A restricted random sample of 35 of the 113, with the restriction that five be located in each of the six regions and from Cook County was drawn. A second group of 35 agencies was selected in the same manner from a summary list of agencies that had submitted local plans for Fiscal Year 1973 but had not been visited during Fiscal Year 1972. This list was

additionally adjusted to assure that proportions of postsecondary institutions would be approximately balanced across the three groups.

The resultant combined list constituted the study population for this project. Because full data was usually available for 70 of the 71 agencies visited during Fiscal Year 1972, the numbers of agencies visited during Fiscal Year 1972 were equalled by the number of agencies sampled from the other two lists. The combined population of 140 agencies is not perfectly representative of either agencies submitting plans in 1972 or for Fiscal Year 1973. The lack of representiveness was due in part to lack of a final listing from which to sample but also because agencies did not have equal probabilities of inclusion in the sample. However, as will be indicated later, the agencies that were visited in Fiscal Year 1972 were not themselves a random sample of all agencies submitting plans for that year. Therefore, it was not possible to attain a fully representative sample of agencies.

Questionnaire to Preparers of Plans

After Division and Unit personnel had been interviewed, and available documents studied, a questionnaire (see Appendix) was prepared for mailing to persons who were involved in the writing of plans on behalf of LEA's. This questionnaire, which was accompanied by a covering letter from the Executive Director of the Advisory Council, was distributed to 137 individuals whose names were submitted to the Division as planners who signed and were known to have been involved in program planning. (Some planners signed but were not actively involved in planning. It is, for example, customary for the superintendent of the Chicago Public Schools to sign such documents even though he devotes no time to their actual preparation; therefore, he did not receive a questionnaire.)

The questionnaire contained 27 items, one of which had 10 subitems. It was accompanied by an envelope, self-addressed and stamped for return to ETS. After five weeks, 114 of the recipients (83 percent) returned their questionnaire in time for processing and inclusion in this report.

Questionnaire to Visiting Team Members

A second questionnaire (See Appendix) was prepared for mailing to members of the visiting teams. This questionnaire was not distributed to all team members; rather, while all persons were included whose descriptions suggested they were not professional educators, it was decided that only a sample of the educators was needed. The number of noneducators to whom the questionnaire was mailed totaled 88; the number mailed to educators totaled 60. The questionnaire for team members contained 10 items, one of which had eight subcategories and another had seven. These questionnaires were also accompanied by an envelope addressed to ETS; after five weeks 61 (69 percent) questionnaires were returned by noneducators and 57 (95 percent) were returned by educators.

Analysis of Evaluation Report Data

As was mentioned earlier, site visitations are followed by the printing and formal submission of an "Evaluation Report" of the occupational programs of the agency. These composite reports included profiles of the type shown in Figure C on the following page.¹

¹An Overview of the Three Phase System for Statewide Evaluation of Occupational Education Programs. Springfield: State of Illinois: Board of Vocational Education and Rehabilitation.

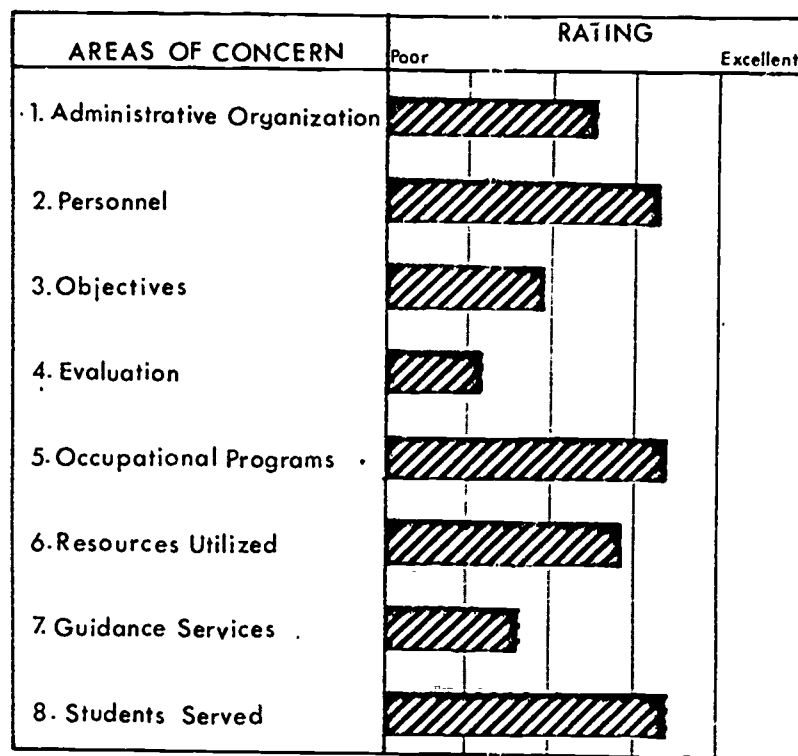


Figure C
Example of Bar Graph in Evaluation Report

The profiles summarize for readers of the report the impressions of the visiting team. It is not possible to determine the validity of the ratings by analysis of the content, but analysis of them can contribute answers to questions like the following: Do personnel always receive high ratings? Does everyone get the same rating? So some teams give biasedly higher or lower ratings than other teams? Therefore, the analysis of ratings received by the agencies that were visited in 1971-72 was part of this project. Numerical values were assigned to each of the ratings in the eight areas of concern whereupon a variety of analyses were conducted for them.

Fiscal Audit Outcome Analysis

One of the goals of the System is to "help assure accountability of Federal and State funds allocated to local occupational programs."² With

²Three Phase System for Statewide Evaluation of Occupational Education Programs, *op. cit.*, p. 2.

the collaboration of the Fiscal and Statistical Unit of the Division, arrangements were made to have Fiscal Year 1969 financial audits conducted prior to team visits. It was thereby possible for teams to receive as part of their orientation materials results of the fiscal audit. While it is evident that the audit would be conducted for time periods that occurred prior to initiation of the Three Phase System (or even of the employment of its current staff), this effort to coordinate site visitation with fiscal accountability concerns was judged to be an important effort worth special study. Consequently, records of the Fiscal and Statistical Unit that included data for the agencies in our basic sample were examined; data was extracted from them for summary and reporting.

Study of Trends in Statewide Evaluation

An external (to the Division and its functions) survey project undertook to determine national trends in statewide evaluation which might be considered important for the Division. These trends might be important both as standards against which Division performance might be judged and for the ideas they would produce that could guide and benefit the Division in its efforts to improve evaluation practices. Dr. Gordon Law, Professor, Department of Vocational-Technical Education at Rutgers University, who is a nationally recognized scholar and consultant to state agencies studying their evaluation systems, in collaboration with Dr. Raymond Wasdyke of ETS at Princeton, undertook a literature search and produced a critical summary from it. The result of that investigation is, with modifications, incorporated as a section later in this document.

Miscellaneous Studies

Not all of the many lesser studies that were conducted need special

identification and notation. However, two additional studies merit mention. One was a study of the pattern and trends of submissions of claims for payment for elementary school (K-8) programs. This study was initiated because national statistics for the impact of this funding had been heavily influenced in prior years by a very large increase in pupils enrolled in the state. The study that was undertaken extracted for the basic sample of schools the actual and estimated enrollments for the program as recorded in Section G - Summary of Local District Plan.

A second study called for the identification of new program initiation in sampled agencies during 1971-72 and of proposals for new program initiation by the same agencies for 1972-73. Data for this study was accumulated from two sources. Mid-year reimbursement records generated by the Fiscal and Statistical Unit were studied to acquire identifications of initial programs funding during 1971-72; new program submissions for Fiscal Year 1972-73 were copied from Section D entries of the Annual Plan submitted for that year. Entries from these records were coded on special data sheets to facilitate keypunching for later analysis.

OUTCOMES

Analysis of the Three Phase System

Phase I: Development of Local Plans

In 1970 the Research and Development Unit of the Division funded Research Project RDC-A1-029 entitled Study of Local Plans Submitted by School Districts in Illinois to the Board of Vocational Education and Rehabilitation. The study was directed by Dr. William Rogge of the University of Illinois. A final report draft was submitted in June 1971.¹ This study, which involved many months of plan reading and interviewing of local planners for high school districts, resulted in an extremely useful document. Prior to the conduct of visits to 87 high school districts, a total of 293 local plans submitted to the Board of Vocational Education and Rehabilitation were reviewed.

Because the work conducted by Dr. Rogge's group was extremely complete, the ETS study of Phase I activities did not attempt to repeat it. Instead, this investigation attempted to update and extend knowledge that had already been acquired. A large fraction of the items that were included in the questionnaire for program planners was linked to the Rogge report. The actual reading of plans for this study was undertaken with the same questions in mind. In the sections that follow, the Rogge report and then our supplemental research are discussed.

Rogge's Local Plan Study

The Study of Local Plans was designed to answer four questions. Quotations of those questions with some elaborative information eliminated follow:

¹William M. Rogge, Study of Local Plans Submitted by School Districts in Illinois to the Board of Vocational Education and Rehabilitation Urbana-Champaign: University of Illinois, June 1971.

1. To what extent does the local district use a planning process?
2. To what extent does local planning incorporate the high priorities of the 1968 Vocational Amendments and the State of Illinois Guidelines?
3. To what extent do local plans (written documents) reflect the actual intentions and activities of the school district?
4. To what extent are local plans actually used as a document in restructuring local programs, especially in the development of new programs and in the inservice training of staff?²

The analysis which was reported in the Final Report Draft heavily emphasized concern for change process in the utility of agency planning as a device for producing improved educational programs. This approach is consistent with a generally unstated purpose of the Three Phase System, which is to stimulate educational change within applying institutions. The report maintains consistent concern for the change-inducing potential of the Phase I planning process throughout its narrative. At the end of the document an extensive list of conclusions was drawn. A partially edited list of conclusions follows.

1. The requirement to prepare a local plan for the state so far has resulted primarily in giving those specifics that will assure reimbursement. Other sections tend to remain general and are not taken very seriously in follow-through activities.

2. Partly or largely because of reimbursement being tied to course offerings, a majority of the changes perceived as significant at the local level are course additions or changes.

3. Local planning in each school district fails to meet many or most of the criteria for good planning. Even those criteria most emphasized, such as collecting and using data, are not met in most school districts.

- a. Planners are almost completely vocational teachers, administrators, and counselors. Almost no students and few laymen are involved.

- b. Planning time is limited; few planning resources are available; outside consultants are primarily "content" experts.

²Ibid., p. 2.

- c. Background data, such as job opportunity surveys are often available in some areas but not others; available data often is not used seriously.
 - d. National priorities are examined more for reimbursement funds tied to them than for the underlying reasons they were established.
 - e. Creative problem solving is almost non-existent in local planning.
 - f. The internal communication of the planners is not singled out as an aspect of planning to be improved.
 - g. The goals set for local vocational programs are too broad and general to be used for focused planning.
 - h. The recent developments for "systems" planning are almost completely unused.
 - i. Follow-through that concentrates on changing the behaviors of people is limited to verbal, cognitive, symbolic behaviors, and not those behaviors evident in such procedures as micro-teaching.
 - j. Evaluation of the planning process is almost unknown.
4. The expectation that local planning shall be done by local school districts is, in itself, not a sufficient force to produce effective planning. Other inputs are required, including:
- a. Financial support specifically earmarked for planning.
 - b. Training of local personnel to lead planning activities.
 - c. Outside consultants trained to help in the process of planning.
 - d. Reimbursements also tied to the use of evaluation and follow-through.
5. Vocational planning at the local level is dominated by one or a few persons, mostly teachers, counselors, and administrators.
6. Most local districts are not large enough to support comprehensive planning activities. Too many other immediate concerns rate a higher priority.
7. Other than the addition of courses, the many high priorities of federal legislation and state guidelines are not being met through existing local planning at a level that probably will be acceptable to legislators.
- a. Programs for the disadvantaged are mostly at the stage of identification and stating objectives, but are not comprehensively carried out. Some notable exceptions exist, however.
 - b. Pre-vocational programs are not seriously being planned in most school districts.
 - c. Handicapped children are perceived by vocational educators as being provided for primarily by existing special education programs.
 - d. Counseling and guidance services are being expanded but few new approaches are being developed.
 - e. New occupational areas are being developed too slowly probably to satisfy congressional demands. The changes are too limited to revamping existing courses and programs.

The Rogge report concludes with the presentation of four major recommendations that support (1) the use of state reimbursement funds for planning, inservice training and evaluation, (2) *regional planning* to assist, in particular, small school districts, (3) use of training programs to improve planning, and (4) service by educators in internships in industry and government, and by noneducators in vocational education.³

Outcomes of ETS Questionnaire Study

Many of the items that were included in the Questionnaire for Program Planners were used to learn how respondents viewed the planning process in September 1972. Two items (Items 10 and 17) asked about the help being given by the staff of the Planning and Evaluation Unit of the DVTE to planners. A strong majority of respondents seemed to feel that the Unit was attempting to be helpful and was successful in its effort. Whatever the need for external assistance was, it would seem partly necessitated by lack of clarity in instructions received on forms of the Division. Forty percent of respondents disagreed with Item 1 which stated that instructions were "clear and easily understood;" 43 percent responded in the same manner to Item 22 which stated that guidelines "helped us to develop needed new programs." Similarly, a majority of respondents to Item 5 disagreed that the Division was doing a good job of helping them "to understand how to meet financial accountability requirements."⁴

Responses to Item 9 suggest that the planning effort did not become easier with time. That is, 42 percent of respondents to the item indicated that

³Ibid., p. 31.

⁴The percent of response to each item of the questionnaire is presented on the sample instrument included in the Appendix.

it took as much or more time to prepare the 1972-73 plan as it did in 1971-72. One problem in planning was to know how to identify or classify handicapped students. Responses to Item 11 suggest that about 3 out of 4 planners believed they had trouble knowing which students should be classified as handicapped.

Good planning should, authorities say, involve the use of Advisory Committees, students, and other individuals with special understanding. Several items were included to learn about the use of these other persons. Responses to Item 4 suggest that employer representatives were helpful contributors in planning. A small majority of respondents to Item 13 indicated that students were "a big help" to them in their curriculum development. A majority of respondents to Item 18 expressed confidence that employers knew enough about skills their employees need to be helpful in program development. However, responses to Item 21 indicated that it was not easy to involve Advisory Committee members in planning.

Is availability of fully modern equipment important to occupational programs? This issue was submitted as Item 19. About one-third of those who answered the item indicated they believed that having fully modern equipment was "not important" for occupational programs; the remainder disagreed with this position.

The planning process can itself be very expensive. Item 12 was included to determine whether respondents believed the cost of planning could be justified by the amount of money received. Respondents were about equally divided on this item indicating that the amount of money received was not sufficiently high to convince most planners that the effort was clearly justified by the resultant reimbursement.

One block of items (those for Item 6) was included to seek current veri-

fication that recommendations of the Rogge Report for the need for external assistance in planning still existed. These items had concern for each of many types of assistance. Responses to them seem clearly to indicate that assistance was thought to be needed for (1) the conduct of student followup studies, (2) the conduct of local community needs surveys, (3) the conduct of employer needs surveys, (4) the preparation of behavioral objectives, (5) the conduct of evaluation, (6) the identification of job entry skills required of students, (7) the setting of priorities for program development, and (8) the actual preparation of comprehensive planning documents. Two types of assistance were less important in the minds of respondents. Slightly more than half disagreed that help was needed to conduct student interest surveys; because of help already provided to them by the Division or for other reasons, only one-fourth felt they needed help in the organization of Advisory Committees.

Responses to the items of this questionnaire strongly support the conclusions drawn in the Rogge Report. They indicate that the personnel of the Division were generally rated as helpful, that some of the printed materials were difficult to use, and that a substantial amount of external assistance was needed. From this it can be seen that the planning documents provided by the Division at the time this study was conducted were regarded as falling short of planner's needs; improvement of the documents should be sought.

Phase II Approval of Local Plans

Various kinds of information were collected in an effort to throw additional light on the influence of evaluation procedures on the rate of acceptance of plans reviewed by the Department of Vocational and Technical Education. In an attempt to get a different type of information, the Status of Plan

Reports were checked for the 141 institutions included in our sample. The following tables shows the results for the three groups of institutions: first, those schools that were visited during the 1971-72 academic year; second, those that were not visited in 1971-72 but will be visited in 1972-73; and third, those schools which were not visited in 1971-72 nor are there plans to visit in 1972-73.

Table 1

APPROVAL STATUS OF PLANS AS OF SEPTEMBER 8, 1972

<u>Program Year</u>	<u>A*</u>	<u>CA</u>	<u>NA</u>	NA to CA	NA to A	<u>Total</u>	<u>Totals Initially Not Approved (NA)</u>	
<u>Agencies Visited 1971-72</u>							<u>Agencies Visited 1971-72</u>	
71-72	46	25	0	0	0	71	0	-
72-73	40	16	7	3	5	71	15	21% of 71
<u>Agencies to be Visited in 1972-73</u>							<u>Agencies to be Visited in 1972-73</u>	
71-72	15	19	1	0	0	35	1	3% of 35
72-73	17	18	0	0	0	35	0	-
<u>Agencies not Scheduled for Visits</u>							<u>Agencies not Scheduled for Visits</u>	
71-72	11	22	0	2	0	35	2	6% of 35
72-73	15	18	1	1	0	35	2	6% of 35
<u>Totals</u>							<u>Totals</u>	
71-72	72	66	1	2	0	141	3	21% of 141
72-73	72	52	8	4	5	141	17	12% of 141

*A Fully Approved
 CA Conditionally Approved
 NA Not Approved

Of the 71 schools visited in 1971-72, 46 were fully approved (A) on the first round of readings and 25 were conditionally approved (CA). For the same institutions in 1972-73, 40 were fully approved on the first round and 16 conditionally approved. A total of 15 were not approved which meant that 21 percent of the 71 institutions that were visited during the previous year were not initially approved. However, of the 15 schools, only 7 that were not approved initially remained not approved (NA) at the time of this study. Five of the institutions that were not approved initially received full approval after submitting revised plans (NA changed to A) and three received conditional approval (NA changed to CA).

In contrast to this, for the group that will be visited in 1972-73 (a total of 35 institutions), 15 schools received approval after their initial reading in 1971-72 while 19 received conditional approval; only one of the 35 institutions did not receive approval. For the same 35 institutions in 1972-73, 17 received full approval and 18 received conditional approval. No school among the 35 to be visited in 1972-73 was disapproved initially this year.

Substantially the same results were obtained for the 35 schools that were not scheduled for visits as for those that will be visited this year; 11 received full approval initially in 1971-72 while 22 received conditional approval. Two initially were not approved but after submission of revised plans received conditional approval. For 1972-73 these same 35 institutions were processed as follows: 15 were fully approved, 18 were conditionally approved, and 2 were not approved. Of the 2 that were not approved 1 received conditional approval after submitting a revised plan and the other had not received approval as this report was being prepared.

Summarizing the results across all 141 institutions, we find that for 1971-72, 72 schools received full approval initially, 66 received conditional approval initially, and only 3 were not approved. Of the 3, 2 eventually received conditional approval of their plans. The following year, the distribution was as follows: 72 institutions received full approval initially, and 52 received conditional approval. However, 17 (12 percent) of the schools were not approved initially. After the resubmission of the plans, 9 were approved, 5 fully and 4 conditionally. As a result of the team visits and the evaluation reports which teams prepared to describe the programs in the 71 institutions, there was a sharp increase in the number of plans that were not initially approved. This percentage went from 2.1 percent in 1971-72 to 12 percent in 1972-73, indicating that site visitation contributed information used to disapprove programs. Without this information there had earlier been few rejections.

A further analysis of the 17 plans that were not first approved in 1972-73 reveals a difference in the rejection reasons given for those institutions that were visited and those that were not. Of the 15 schools that were visited the reasons generally related to failure of the schools to respond or comply to recommendations made by the evaluation team. For those that were not visited, the comments were very similar to those made by the Division the previous year. They primarily noted failure of the applying agency to state objectives and goals of the programs in behavioral terms or failure to meet one of the technical requirements of the Three Phase System. It seems evident from an examination of reports that the kinds of deficiencies found in vocational-technical programs by evaluation teams have had a marked influence on initial Status of Approval of plans by the Division after visitation has occurred. Summary Reports have been used to guide readers of plans as they determine rejection or acceptance the following year. This could lead to

improvements in the quality of plans as well as the vocational and occupational education programs being offered in the schools.

The most common basis for rejection of 1972-73 proposals seems to have arisen because agencies did not specifically deal with recommendations of the visitation team when submitting their continuation proposal. However, specific references were also often made to lack of behaviorally stated objectives; other reasons, none with high frequency, included need to appoint a Director of Vocational Education, the necessity of organizing an Advisory Council or take steps to do so, or to attempt to improve counseling.

Whether the reasons for nonapproval would lead, when responded to, to improved programs for students can only be surmised. For example, it is not at all clear how stating objectives behaviorally would lead to important improvements in program outcomes. Similarly, the general exercise of responding in writing to recommendations can conceivably contribute very little to program alteration.

Records of the Program Approval and Evaluation Unit also indicate that a heavy amount of follow-up effort was directed toward helping agencies that had been visited. Memoranda and notes attest to very extensive transfer of information about agency needs to other units of the Division for action. It must be accepted that follow-up was not left to chance.

Two items in the questionnaire for planners requested information about the review process. Item 2 requested judgments of fairness of the proposal review process. Less than 20 percent of respondents disagreed that proposals would be reviewed fairly and on schedule. However, about one-third of all respondents indicated disagreement that they understood the criteria by which plans were to be reviewed and judged. This latter

response suggests that some plan writers, for whatever reason, had serious difficulty anticipating how criteria might be applied to their plans; this lack of understanding can become more apparent and evident as the visitation phase of the System is used for additional agencies.⁵

Phase III: On-Site Visitations

Visitation teams consisted of from three to more than 20 individuals, one or two of whom were designated to be team leaders. No single formula existed or could be established whereby the vocational characteristics of team members could be precisely stated. However, each of the different types of persons who were to be sought and invited to be team members could be found in the list for one or more agencies.

In this section the distances between the sites to be visited and the work or home addresses of visitors is the first point of discussion after which outcomes of the visitation and its follow-up are attended to.

Distances Team Leaders and Members Lived from Agencies Visited

It is often suggested that evaluative site visitations suffer heavily from the development of excessively friendly relationships between the visitors and personnel of the sites they visit. If reciprocal visitations occur over years it is suggested that reciprocity may also appear in ratings that are given, with the result that ratings become very similar and can be expected to be consistently favorable. A counter argument used to justify recruitment of visitors from nearby locations is that this reduces travel costs through reduction of out-of-pocket expenditures as well as by the elimination of travel time.

⁵Approval rates for plans submitted by local agencies in Fiscal Years 1970-72 were summarized on p. 34 of the Annual Descriptive Report for July 1, 1970-June 30, 1971 (Bulletin No. 33-372).

To determine from what distance team leaders and team members were recruited, a tally was made of estimated linear distances, in miles, between home or work address of the team member and the location where a visit was conducted. These distances, which are less than highway mileages, were read from a standard mileage map for Illinois. Error of necessity exists in this measurement process but its amount should not exceed an average of two or three miles. The median mileage estimate for the 69 sites that were included in this tabulation was 38; the range of linear mileages is from 12 to 114 with the combined distribution shown in Table 2.

Table 2

Linear Miles Between Home or Work Locations of
Team Members and the Agencies they Visited

<u>Range of Miles</u>	<u>Number of Agencies</u>	
	<u>In Interval.</u>	<u>Cumulative</u>
10-19	4	4
20-29	15	19
30-39	19	38
40-49	16	54
50-59	8	62
60-69	3	65
70-79	-	
80-89	3	68
90-99	-	
100-109	-	
110-119	1	69

It can be seen from this distribution that most team members were recruited from less than fifty miles from the site they visited. The potential for developing close interpersonal relationships between visitors and visited and for indebtedness to each other for kindness during the preparation of visitation reports cannot be discounted as a source of future concern. In

densely populated areas, fifty miles could serve as a very effective barrier between excessive personal familiarities; however, in rural areas, a distance of fifty miles might be accompanied by some degree of familiarity and sympathy for another's problems.

Analysis of Evaluation Report Profile Data

Each agency that was visited received an Evaluation Report. This report included both narrative and figural summaries. The eight bar profile constitutes the most visible and attention getting part of the report. It also provides, because of its quantitative nature, a basis for seeking information about sources of bias that might have entered into the rating process. For this reason profile information for the agencies that were visited was coded on a scale from 0 to 5 for analysis. This data together with information identifying team leaders, sizes of teams, regions in which the agencies were located, types of agency and needs of agencies as reflected by ability (ABL) and adjustment (ADJ) reimbursement information were punched on data cards. This data was subsequently analyzed in a variety of ways with the results reported in the subsections that follow.

Correlation Analyses

Data from 68 of the 71 agencies that were visited was intensively analyzed. The mean and standard deviations of ratings on the eight profile levels are recorded in Table 3.

A rating of 2.5 would be a mid-scale or average rating for the profile that is used. Of the eight levels, three received mean ratings below 2.5, although two of them were in the "average range" (2.0 to 3.0). The lowest ratings went to Evaluation which was the only rating falling in the "below average" range (1.0 to 2.0). The second lowest mean rating was given to

Statements of Objectives. The 2.4 average rating received by Guidance Services was only slightly below mid-scale. It is important to keep in mind, however, that these ratings reflect team perceptions of local potential for improvement.

Highest ratings and ratings with the least variability associated with them were assigned to Personnel. *This suggests that, as is quite common in professional personnel rating systems, visitors were unable or unwilling to make distinctions between different levels of personnel capability and therefore issued relatively high ratings as an acceptable compromise to deal with those difficulties.* It is interesting that only two of the eight ratings had means falling in the "above average" range (3.0 to 4.0); one went to Personnel and the other to Students Served.

The category receiving the most variable ratings was Guidance Services. Table 3 shows that the standard deviation for this category was 1.04.

What correlations exist among these ratings, team size, and ability data? These are reported in Table 4.

The inter-correlations among the eight composite ratings range from $-.04$ to $.62$, with the largest number of them in the $.4$'s. This suggests that there is similarity among the eight levels but not so much that they do not contain importantly different information from each other.

Correlations between these ratings and both team size and ABL, however, tend to be negative. For example, a correlation of $-.26$ arose between size of the team and the Administrative Organization category, suggesting that those agencies having the largest number of programs were seen to be less effective in their efforts to arrange for their management than agencies having fewer programs. Guidance Services were also seen to be less effective in the larger agencies.

Table 4

Correlations Among Eight Composite Ratings, Team Size and Ability for 68 Agencies

Variable	(1) Admin. Organ.	(2) Personnel	(3) Objectives	(4) Evaluation	Variable (5) Occupat. Programs	(6) Resources Utilized	(7) Guidance Services	(8) Students Served	(9) Team Size	(10)* Ability (ABL)
(1)	1.00	.36	.45	.45	.48	.44	.30	.30	-.26	-.14
(2)		1.00	.34	.18	.44	.30	.24	.24	-.04	-.09
(3)			1.00	.62	.37	.47	.23	.46	-.10	-.05
(4)				1.00	.18	.47	.40	.26	-.13	-.04
(5)					1.00	.42	-.04	.48	-.05	-.13
(6)						1.00	.24	.55	.00	-.30
(7)							1.00	.16	-.18	-.16
(8)								1.00	-.12	-.38
(9)									1.00	.00
(10)										1.00

*Variable 20, ABL, employs a "Weighted Plus Factor" scale from 0 to .8 based on the fractional relationship between Equalized Assessed Evaluation and either number of students enrolled or full time equivalent students. Higher decimal values on this scale indicate greater need for financial assistance. Bulletin No. 4-171-2, pp. 11, 12.

The correlation of $-.38$ that arose between ABL and the Students Served category indicates that more needy agencies in terms of financial ability to support programs from local funds received lower ratings on this category; indeed, the first eight negative correlations in the ABL column indicate consistency in tendencies of teams to assign lowest effectiveness ratings to agencies having greatest financial need. A potentially disturbing statistic in the ABL column is the correlation of $-.30$ between (local) Resources Utilized and ABL which suggests agencies having greatest need tended to make least effective use of resources available to them even though they have greatest need to do so; it is difficult to reconcile this relationship with consistently high composite ratings for personnel. Personnel ratings may be made without appreciable concern for how the individual staff member uses these resources.

The negative relationships which appear between composite ratings and ABL also indicate that, as was reported in figures of the Composite Evaluation Report,⁶ the ratings were, when recorded, still related to "teams perception of local potential for achievement." They imply that needier agencies received lower ratings even *after* local potential was taken into consideration. If that were the case it might be thought that needier agencies should receive even greater financial support than is now provided to them. However, because the System has, as yet, provided no firm information to describe how adjustments for local potential are made by team members, no useful meanings can be given to these negative relationship between System data elements; indeed, unless encouragement to make adjustments is either dropped or procedures for doing so are made clear the usefulness of composite ratings may be difficult to defend over time.

⁶Composite Evaluation Report for Occupational Education in the State of Illinois Fiscal Year 1972, Springfield: State of Illinois, Board of Vocational Education and Rehabilitation. pp. 7, 14, 18, 22, 28, 33, 37, 41.

Several summary conclusions can be made from the correlation analysis:

1. Mean ratings for Evaluation and Statements of Objectives were lowest of the eight ratings.
2. The mean rating for Personnel was highest and showed least variability.
3. Ratings for Guidance services showed greatest variability.
4. Negative correlations between composite ratings and team size indicate that larger agencies tended to receive lower ratings; this relationship was most pronounced for Administrative Organization.
5. Negative correlations between composite ratings and ABL indicate that neediest agencies tended to receive lower ratings.
6. The stipulation that composite ratings include adjustment by team members for agency "local potential" importantly limits the conclusions that can be drawn from composite ratings.

Variance Analyses

A strong method for learning more about the effectiveness of Phase III activities involves analysis of the variability of ratings. The most important of the analyses that were undertaken involved data for 48 agencies and 16 different team leaders. The purpose of this analysis was to determine whether team leaders, who often served with more than one team and for more than one agency, might contribute to unusually high or low ratings for the agencies they were assigned to. Sixteen team leaders had served with three different agencies. Therefore, an analysis was undertaken to determine whether these leaders might have unknowingly or otherwise consistently contributed to lower or higher ratings for the agencies they visited. The analysis showed that mean ratings given to agencies differed in nonrandom ways across the team leaders. It also revealed that no evidence of systematic interaction between the different leaders and the categories of the composite ratings could be identified.

Subsequent study of the type of agency visited by team leaders indicated that some had had greater responsibility for visits to agencies having lower abilities as defined by the ability index (ABL). Consequently, it must be concluded that differences in composite ratings that were made under the direction of the different team leaders can be as easily attributed to agency features outside their control, as to the performance of the team leaders. No convincing evidence of the influence of bias by team leaders was found to exist. The same conclusion was appropriate for a supplemental analysis that included team leaders who had visited but two agencies.

Variance analyses were also performed to seek relationships among ratings assigned by team size, type of agency, and region of the state. Each of these analyses showed no differences which would suggest the rating system as employed in the visitation phase differed in the various regions of the state, for different types of agencies, or team sizes. The negative correlations between agency size and ratings that were reported earlier were too small as a group to produce an effect in team size variance analyses.

The conclusion that can be drawn from analysis of the ratings is that evidence of bias associated with team leaders, size of teams, region of state, and type of agency cannot be isolated. However, biases could appear over time. It might be anticipated that bias could, if it were to appear, arise gradually as the system became more broadly used, and persons became more familiar with it. Recommendations which follow at a later point in this document are intended to contribute to the prevention of bias arising at a future time.

Profile Rating Questionnaire Responses Analysis

The questionnaire on profile ratings was designed for the purpose of learning more about how ratings were prepared and how members of visitation

teams viewed the visitation process about a half year after participating in it. They were first asked how ratings were derived for the composite section. They responded that informal discussions were most often used, although quantitative ratings (presumably on a 0-5 scale) were often employed. Both educator and noneducator respondents indicated that the profile ratings they would have assigned as an individual were similar to the responses that ultimately were assigned. This item was particularly important because of the commonly held impression that noneducators might rate occupational programs lower than educators. This was clearly not the case. In fact, scrutiny of responses to all items in the questionnaire and particularly those to Item D suggest that noneducators were, if anything, less critical in their ratings than educators.

Responses to Item F revealed that team members believed their training to serve on the team was adequate (more than 80 percent of the respondents said "yes" to this item). More than 80 percent also said they were positively impressed by the operation of the Three Phase Evaluation System (Item I) and expressed willingness to serve again as a team member if invited to do so (Item H).

Three out of four noneducators said they were positively impressed by what they learned about the programs of the agency; a similar number of educators agreed with this item. Both most often agreed, when responding to Item G, that visitation teams of five or more individuals should include at least two persons who are neither educators nor students.

Item D requested a judgment of the efforts of agencies in each of seven areas. Efforts were judged to be most satisfactory for the acquisition of up-to-date equipment and the development of work-study programs for which "yes" responses exceeded 66 percent. Efforts to develop sound working relationships with persons in the service area came next in ranking with "yes" responses

in the 60 percents. Noneducators (70 percent) and educators (53 percent) were less in agreement with regard to the efforts being made to determine skills needs of students.

Lowest ratings were given to the efforts of agencies to place students in jobs, to determine the skills that program graduates possess, and to follow-up on students after they leave school. Ratings on the last three items were so low that they suggest increased efforts should be made in those areas if programs are to be improved.

Responses to Items in the Planners' Questionnaire

Five items in the questionnaire for planners were to be responded to only by persons whose agencies had been visited in 1971-72. Responses to these items were generally very positive. For example, 44 of the 56 respondents agreed or strongly agreed that the visitation team prepared a fair and competent report (Item 23). Forty-five, in responding to Item 24, indicated they knew, at the conclusion of the visit, what had to be improved upon if the agencies' program plans for 1972-73 were to be approved. Forty-three of 56 who responded to Item 25 indicated team members were well prepared to do their work.

In addition, 35 of 56 agreed or strongly agreed that they received good follow-up support from the Division after they were visited. This number seems low enough to wonder whether follow-up support was as strong as it might have been. A question, the answer to which, is deferred to a later point.

Forty-four of the 56 respondents to Item 27 indicated they believed the Three Phase System should be continued at least until each agency had been visited twice.

Six other items in the same questionnaire had concern for the visitation system and were responded to whether or not an agency had been visited. Opinions were about evenly divided on the question of whether visiting team members should come from more than 50 miles from the agency they were to visit (Item 8). A strong majority (80 percent) indicated in responses to Item 7 that schools to be visited in Fiscal Year 1973 would benefit from the preparation they would make for the visits. Less than 20 percent expressed belief that site visitation would prove to be a waste of time and money (Item 20).

However, more than one-third of respondents suggested their counselors might not be well qualified to do occupational counseling (Item 14) although more than 72 percent believed the agency should formally help graduates and dropouts get placed in jobs (Item 15). Finally, in the responses to Item 16, 74 percent said they would like to see their programs judged by the occupational skills their students acquire.

The data of this section suggests that the visitation system of the Three Phase System has been positively accepted and is being competently implemented. Recipients of ratings believed they were being fairly evaluated by the System and that it was beneficial to them. They expressed these views even though their programs had not received completely favorable ratings. In fact, counselor qualifications, student follow-up and assessment of skills were often cited by them as weak spots in their programs. Thus the rating system is providing information, not all of which is favorable, that agrees with the impressions of persons on site as planners.

Related Studies

Fiscal Audit Analysis

One goal of the Three Phase System is to help to assure accountability of federal and state funds allocated to local educational programs. Audits of agency records for previous years have been included in the design of the Three Phase System as a precedent to site visitation. Therefore, prior to visitation in Fiscal Year 1972 many agencies received fiscal audits of their FY 1969 records. These audits could not reveal deficiencies in the Three Phase System, because the system did not exist at the time the over- or underpayments occurred; that is the System did not exist in Fiscal Year 1969. However, the problems which local education agencies had in understanding requirements for payment and maintaining records for payment are problems which might still exist and therefore were judged to be worthy of attention.

The Control Sheet record of Fiscal Year 1972 funds that is maintained by the Fiscal and Statistical Unit of the Division contained entries made from January 4, 1972 to July 31, 1972 that reflected a balance of \$314,060.00. The entries that were made were largely for overpayments (\$419,565.00 in debits) although underpayments were also recorded (\$105,505.00 in credits).

Agencies that received less than \$5,000.00 in reimbursements were not audited. Auditors were primarily concerned with evidence of enrollments and were provided with guidelines for sampling of record books and other steps to determine what enrollments had been. Six codes were used to classify the adjustments that were made: (1) Insufficient Record, (2) School Error, (3) Error in Springfield, (4) Not Substantiated, (5) Overclaimed Enrollment, and (6) Overclaimed Units. Negotiations were sometimes conducted with agencies that did not agree with outcomes of the audit, whereupon amounts noted in original adjustment letters were sometimes changed through use of an Adjustment Memorandum.

Not all of the agencies that were visited in 1971-72 received audits. Sampled agencies to be visited in 1972-73 showed debited adjustments in excess of \$10,000.00; sampled agencies not scheduled for visits showed debits of \$246.00. This makes clear that agencies visited in 1971-72 tended to have larger programs than those not visited. Also, because exceptions were noted for each of the agencies that were audited, misunderstandings about requirements for reimbursement were extremely widespread.

Occupational Information Programs (K-8) Analysis

The Section G K-8 enrollment statistics for local district plans for FY 73 were recorded as part of the data collection process. This data was collected primarily because of dramatic increases in Illinois enrollment during preceding years which had been noted by the Illinois Advisory Council.⁷ The increases had included enrollments for elementary occupational information. The data that was collected was intended to be used to identify continuation of trends that might be associated with approval processes.

Thirty-three of the agencies that received site visitations in 1971-72 reported K-8 data in their Section G's; 11 of the agencies to be visited in 1972-73 and 16 of the agencies not yet scheduled for visitation also submitted such data. Most, 42 of the 60 agencies in the combined group, making submission listed all students enrolled in the System as having benefits scheduled for them. This proportion represented an increase of more than 10 percent over the preceding year with no important trends visible in the data. At the time this information was collected, the request for reimbursement that had been submitted for all students enrolled in the Chicago Public Schools

⁷Annual Evaluation Report FY 1971, State of Illinois Advisory Council on Vocational Education, January 1972, p. 9.

had not received approval. The critical decision to approve or eliminate the reimbursement for large numbers of Chicago students (419,000) clearly results in a dramatic impact on enrollments for a fiscal year.

New Program Initiation Analysis

An effective evaluation system might be expected to have an impact upon both the numbers of new programs being produced each year and the importance of those programs as determined by priority levels assigned to them. Consequently, for each of the agencies visited in 1971-72, and agencies on the ETS sample that were not visited at that time, both the numbers of new programs that were initiated and the priorities of those programs were recorded.

The source of information about initial programs for 1971-72 was the Mid-Year Reimbursement Record dated March 18, 1972. Information about new programs was recorded from Section D's of Annual Plans. These records presented no evidence that visitation was followed by increased numbers of programs. Similarly, when all data was combined, the proportions of new programs having priorities A, B, and C did not change between Fiscal Year 1972 mid-year reimbursement records and Fiscal Year 1973 Section D's. Proportions of programs tallied by priority area, as recorded in Table 4, show negligible changes between the years.

Self-Reactance of the Three Phase System

The Three Phase System has been designed to be self-reacting. This is to say that its own evaluation has been designed for it and that the purpose of this evaluation is to assure the System will not fail to change for the better with time. Because the self-evaluation system that has been pre-

pared is a very extensive one this study would not be complete without specific attention being given to it.

The core of the self-evaluation system consists of (1) Local Districts One and Five Year Plans, (2) Demographic Data Forms, (3) On-site Evaluation Instruments (Team Leader Forms), (4) Preliminary Evaluation Instruments for Students, Teachers and Coordinators, Counselors and Administrators, and (5) Evaluation Reports that are prepared. Data from these sources were, in Fiscal Year 1972, coded, stored and processed for use in a three day evaluation workshop that was conducted May 9-11, 1972 with team leaders, regional directors, and other persons in attendance. Information assembled and reported at the meeting about follow-ups to the evaluation visits was favorable to visitation in approximately the same ways that data collected for this specific study was favorable. For example, three-fourths of 910 teachers and administrators who responded to the follow-up questionnaire sent to them by the Approval and Evaluation Unit expressed agreement with the evaluation report. Similarly, more than 90 percent of respondents of all types agreed that having members of the business community on the evaluation team was a good idea.

The broad variety of other items that was included in the questionnaires can and does provide broad amounts of other information about the performance of the System. Effectiveness of the film strip, conduct of team members during interview sessions, the quality of reporting, and meaningfulness of content of the report are all inquired about.

Is there evidence that the managers of the Three Phase System are responding to information they collect about it? The answer to this question must be "yes" for lack of follow-up information about students has been discerned and acted upon. For Fiscal Year 1973 visitations will be preceded by the offering of administration of a follow-up service conducted

by Eastern Illinois University to agencies. Similarly, the pilot conduct of site visitations was followed by modification of the profile reporting practices in favor of the current system. Numerous other types of evidence can be cited to indicate that the System is being modified as information is acquired about its effectiveness. It has been developed as a highly reactant process.

Effectiveness of the Three Phase System in Meeting Information Needs

Table 5 was prepared to briefly summarize relationships that exist between Three Phase System operations and external and internal information requirements of the DVTE that were discussed previously. Immediately preceding sections of this report have given elaborative information about how the System performs; the chapter on recommendations that concludes the document contains background information related to specific action recommendations. Through the use of Table 5, readers are helped to compare the performance of the System against the information needs of the Division and to gain a simple summary understanding of its adequacy.

Inspection of the Table 5 reveals that the System was intended to provide at least partial answers to all of the needs questions except the very first. *No formal provisions were made when the System was developed to assure that the competencies of students at the time they completed their occupational program enrollments would be assessed. This is, very evidently, the most striking and serious deficiency of the System. It provides no output information!* That is, it functions with the expectation that concern for so-called process characteristics of programs will result in the acquisition by students of needed available skills. In fact, no matter how popular the Three Phase System may be with those involved in its use, it will have but slight value for determining the

Table 5

RELATIONSHIPS BETWEEN THREE PHASE SYSTEM OPERATIONS AND EXTERNAL AND INTERNAL INFORMATION REQUIREMENTS OF DVTE.

<i>Information Needs</i>	<i>Is the System Designed to Answer?</i>	<i>To What Extent Is an Answer Provided?</i>	<i>What New Procedures Are Needed in the System?</i>
<u>EXTERNAL</u>			
What measurable competencies do students possess when they complete programs?	No	No information is acquired.	A development program should be initiated to acquire capability for competency based evaluation.
Are the numbers of agencies, programs and support experiences available to students increasing?	Yes	Taped records of numbers of agencies and programs are prepared.	Attention should be directed toward improving the assessment of program provisions for job placement and followup support services.
Are the numbers and qualifications of available teachers increasing?	Yes	No information is collected about numbers of teachers but qualifications are considered in the visitation phase. Lack of variability and generally high ratings for personnel suggest the rating system for teachers may lack effectiveness.	The qualifications to be sought of teachers should be studied with special concern given to the importance of relevant job experience.
Are educational agencies acquiring adequate information by which to plan improved instructional offerings?	Yes	Information about needs is not provided by the System although introduction of a followup service can help. Priority assignments are of questionable value to planners.	The System must be augmented if needs are to be identified and offerings thus improved.
Are guidance personnel and services being improved?	Yes	The System has documented that deficiencies exist in this area; it can report improvements.	The System is providing good information about this deficiency.
Are program enrollments increasing and students retention being improved?	Yes	Program enrollments are reported by the System but retention data is not collected.	The System provides satisfactory information except that individual students' development is not monitored. A special subsystem would be required to get unduplicated student counts and program retention information.
Are students being assisted with placement in employment and followed up when they leave immediate control of their educational setting?	Yes	The System documents that placement services are often not provided; immediate followup is not provided for.	New procedures are needed to monitor job placement.

Table 5 (continued)
 RELATIONSHIPS BETWEEN THREE PHASE SYSTEM OPERATIONS AND EXTERNAL
 AND INTERNAL INFORMATION REQUIREMENTS OF DVTE

<u>Information Needs</u>	<u>Is the System Designed to Answer?</u>	<u>To What Extent Is an Answer Provided?</u>	<u>What New Procedures Are Needed in the System?</u>
<u>INTERNAL</u>			
1. What priorities should be set for program development and the provision of services?	Yes	Needs for services are identified, as for example, assistance in conducting followups or acquiring behavioral objectives but the System includes no specific provisions for the assignment of priorities.	Formal procedures for the entry of System information into Division decision-making are needed.
2. Are funds being correctly spent?	Yes	The System includes cooperative provisions for establishing fiscal accountability. The System is not current in its operations.	Fiscal audit operations should be pressed until they cover the last completed fiscal year's reimbursements.
3. Is the evaluation System reactant; that is, does it possess features for self-correction?	Yes	The System is unusually reactant; this is its greatest strength.	No important changes in the reactance of the System are needed.
4. Are agencies receiving consultation and support as required?	Yes	Formal provisions exist whereby consultation and other assistance is provided. The consultation that is given seems to be effective although some agencies desire greater services.	The System seems adequate but this aspect of Division operations requires constant review as personnel and priorities change.
5. Are business, industry and labor being effectively involved in program development?	Yes	The System delivers information about the effectiveness of community involvement.	Continuation of evidence of community involvement must continue to be a major concern of the System.
6. Do supplies of vocational education graduates meet changing manpower needs in Illinois?	Yes	The System provides no useful information about supply-and-demand relationships.	The System must be heavily augmented if supply-and-demand relationships are to be understood.

benefits of expenditures until program products, as reflected by student performances, are better determined. This necessary relationship between product followup and evaluation has been ably stated by Butler:

The time has come to hold schools accountable for the success of their product. For too long vocational education (and all education for that matter) has been trying to justify itself by measuring the resources that go into the system rather than evaluating the product—the graduate. The majority of evaluation reports still concentrate on comparative studies of teacher salaries, equipment lists, and costs, student-staff ratios, physical plant costs, etc., paying little or no attention to the qualitative success of the students after they have left the schools.⁸

That the Three Phase System was not initially designed to acquire performance information means that it suffers from the common crippling evaluative deficiency noted by Butler.

The System has, however, been designed to provide a very broad range of other types of information. In the third column of Table 5 brief statements are made about the extent to which answers to needs questions are provided by the System. In the last column equally brief statements are made about procedural changes that might help the System to better meet the information needs of the Division. Of course, in some cases, little or no change is needed.

Improved planning for the development of a fully comprehensive information system is clearly needed. However, it can be seen that much of the data now assembled by using the Three Phase System is well suited to serve as a basis for future system development. For example, existing taped records of numbers of reimbursed agencies and programs seem to be of high quality (External Need 2). Also, a large amount of information

⁸F. Coit Butler. Instructional Systems Development for Vocational and Technical Training, Englewood Cliffs, New Jersey: Educational Technology Publications, Inc., 1972, pp. 167-168.

about the effectiveness of the System actually describes both programs and their evaluation (Internal Need 3). Extensive software links currently exist between data recording procedures of the System and fiscal accounting practices. Indeed, as a result of efforts to make the System reactant an unusually high quality, of information for self assessment is being collected; this information can be stored and built upon as an improved System is sought (Internal Need 3).

The System is not designed to record information about the numbers and qualifications of available teachers although personnel ratings delivered by the site visitation procedure have been stored. Lack of variability in this data and the questionable validity of it for the prediction of teacher effectiveness in imparting job entry skills suggest however, that if assessment of teacher qualifications should be an important part of an evaluation system for the DVTE much work remains to be done to make the present System effective for this purpose.

A variety of types of information have previously been cited to suggest that the information LEA's are receiving is importantly deficient for the purpose of improving instructional offerings (External Need 4). Local agencies lack information about community and student needs although some such information will be provided for agencies using the follow-up service that is being pilot tested in Fiscal Year 1973. It is possible that no state possesses a strong needs assessment service and the Three Phase System should not be excessively faulted for this reason. However, this deficiency must be recognized as long range planning for improvement is conducted.

The System seems to be providing good information about inadequacies of guidance personnel and services (External Need 5).

Deficiencies have clearly been documented through use of the System. The deficiencies that have been documented related also to needs for placement services (External Need 7). It is certain that the System could be improved by increased concern for the collection of information about job placement; emphasis in this effort should include concern for students who are not college bound and dropouts. Very greatly expanded follow-up studies are thus called for.

This study identified one problem which the Division cannot respond to by itself. The problem stems from the fact that the Three Phase System acquires information about enrollments in courses but this information, because it does not provide an unduplicated count, cannot be used for federal reporting purposes. Consequently, the Fiscal and Statistical Unit finds it necessary to conduct a special survey of agencies to acquire an unduplicated count for that purpose. Somehow, a continued effort should be maintained to assure that either federal or state practices be changed in a manner which will permit one type of reporting by local agencies for both purposes.

This study uncovered no formal procedures for the transmission of information pertinent to internal Division decision making to its general management staff. This statement should not be interpreted to mean that that no evidence of action upon information can be recognized. On the contrary, the development of a handbook for the preparation of behavioral objectives and other activities attest to the fact that feedback occurs and action is taken. However, until the outcomes of application of the Three Phase System are given formal consideration for priority setting (Internal Need 1) and other purposes it is unlikely it could acquire full effectiveness.

Accountability for expenditures is partially met by the System as augmented by audits of the Fiscal and Statistical Unit. However, as noted earlier these audits are not now current nor do they proceed beyond the level attainable by concern for pupil registration and record keeping. Therefore, until audits can be updated and until they include the Chicago Public Schools it is clear the System will remain deficient in this sphere of responsibility.

The System is intended to facilitate and coordinate the delivery of consultation services to agencies (Internal Need 4). The sincerity of Division personnel within the Program Approval and Evaluation Unit in their personal efforts to be of help is amply documented. Similarly, a large amount of consultation is provided by the Division. The consultation that is currently provided through contributions of the Three Phase System are at least minimally adequate but evidence was not acquired that strongly supports the position consultative support to local agencies is highly effective. This needs additional attention.

The System delivers a substantial amount of information about the involvement of community members in program development but this is clearly an area of involvement that will demand continuous attention (Internal Need 5). Community involvement is closely linked with supply and demand information requirements for the state which is, in turn, a need that is not well met (Internal Need 6). *The System must either be drastically redesigned or heavily augmented if supply and demand information is to be efficiently assembled.*

The strengths and weaknesses that have just been cited are, from the effort involved in their assembly, prepared so that a totally favorable statement of System effectiveness cannot be made. Therefore, it seems important to strongly emphasize that the study has identified

staff and System reactance to be its greatest strength. If one were to select a preferred strength for a System it might be this. The System has been developed with major concern for detail that will permit its own systematic evaluation and improvement. Its staff seem highly open to criticism and suggestions which implies they will not reject sound advice that is given to them. Adaptation of the System is clearly called for because of the severe deficiencies imposed by its lack of output information. This deficiency is one that the Three Phase System has in common with systems (or nonsystems) for state level evaluation that are used in other states. Immediate total revision of the System would therefore be unwise; *long range planning is needed to assure that it will not remain in its present form beyond a time when major improvements can be designed and made.*

Evaluation in Other States

Other states have also been called upon to undertake comprehensive evaluation of vocational and technical education programs. It goes without saying that evaluation and accountability are receiving considerable attention in all state vocational-technical education groups. A most significant recent accountability event has been Marland's Revision of Federal Regulations, dated January 20, 1972, which requires annual evaluation reports by State Advisory Councils and thereby further establishes the role of Advisory Councils in accountability relationships.

An important work in the quest for systematizing the statewide evaluation is that of Starr, Dieffenderfer, Archer and Ernst, A System for State Evaluation of Vocational Education (1970).⁹

⁹Harold Starr, Richard A. Dieffenderfer, B. B. Archer, and Mireille Ernst, A System for State Evaluation of Vocational Education Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University, 1970.

This comprehensive document discusses the logic and logistics of evaluation from the intended purpose and operational characteristics of the desired system through system design strategy to an organizational pattern for staff.

The Center for Vocational and Technical Education effort initially involved three states--Colorado, Kentucky, and New Jersey. Two other states--Connecticut and Michigan--later participated in the developmental work, and the system was field tested in Michigan and Colorado.

Other states have been moving toward statewide system-oriented evaluation of vocational education. In 1969, the Pennsylvania Research Coordinating Unit for Vocational Education sponsored a comprehensive review of the vocational education services in that state.¹⁰ In the following year, a statewide evaluation of vocational education programs was carried out for the Pennsylvania State Advisory Council for Vocational Education (An Evaluation of Vocational-Technical Education in Pennsylvania, 1970).¹¹

This last effort seems to be of the sort envisioned by the U.S. Commissioner of Education Marland in his recent alteration of federal regulations.

Most writers stress the importance of continuous, as opposed to periodic, evaluation. An example of a statewide system for evaluation which involves a continuing effort--and a continuing refinement of evaluative technique--may be found in Oklahoma. The objectives of the Oklahoma project

¹⁰Walter Arnold, Vocational Technical and Continuing Education in Pennsylvania; A Systems Approach to State-Local Program Planning Harrisburg: Pennsylvania Research Coordinating Unit for Vocational Education, 1969.

¹¹An Evaluation of Vocational-Technical Education in Pennsylvania, Prepared for the State Advisory Council for Vocational Education Washington, D.C.: American Vocational Research Corporation, 1970.

are clearly stated:

The overall purpose of this project was to develop and initiate a continuous and detailed Occupational Training Information System (OTIS) to provide a better data base for encouraging necessary changes in Oklahoma's State Plan for Vocational Education and in consequent patterns of Occupational offerings and enrollments.¹²

What should be particularly noted here is the emphasis placed upon on-going utilization of evaluation results in program revision. This has often been a weak area in evaluation schemes. Oklahoma's commitment to further work here may be seen in a description of one of the OTIS activities--the "Development of a State-Directed Evaluation System for Vocational and Technical Education in Oklahoma":

This project will concern itself with instrument designs, objectives of the system, retrieval procedures, analysis of local programs in meeting their objectives, dissemination of findings to the state and local level for program planning and improvement.¹³

Other states are moving in this direction. Massachusetts has what is called an "Information Feedback System," which involves evaluation on a number of levels - Program Evaluation, process-product evaluation, cost-effectiveness evaluation, and overall evaluation of vocational-technical education.¹⁴ Two aspects of the Massachusetts system are of particular interest. The first is the attempt to establish a system whereby evaluation may be effective without destroying local autonomy. The second is

¹²Research and Research-Related Activities of the Division of Research, Planning and Evaluation - 1970-71 Stillwater, Oklahoma: Vocational Research Coordinating Unit, Oklahoma State University, 1972.

¹³Ibid.

¹⁴Kathryn H. Speiss and Eugene R. Speiss (eds.) A Guide to Evaluation: Massachusetts Information Feedback System for Vocational Education. First Technical Progress Report Boston: Massachusetts Research Coordinating Unit for Vocational Education, 1969.

the concern not only with allocation of effort in vocational education planning, but with the place of vocational education within the larger educational system.

This is reflected in Massachusetts development of a statewide system of evaluation for all education. The evaluation system, like the Information Feedback System, involves a cooperative approach with local education agencies.

The Massachusetts system involves the following steps:

- 1) Identification of needs of children, youth, and society in general.
- 2) Establishment of goals for education consistent with these identification needs.
- 3) Development of assessment and evaluation activities to measure learner achievement and program success in terms of the goals.
- 4) Repetition of the above three step cycle through the redefinition of goals and the revision of programs.¹⁵

While not specifically concerned with vocational education, the Massachusetts statewide system of evaluation of education serves as a source for discussion of statewide evaluation schemes. It also at least raises the issue of competition for education dollars between vocational education and other education. The usual approach here has been cost-effectiveness or cost-benefit analysis.

According to Voelkner and Ollis,¹⁶ Texas and Michigan have attempted to calculate the comparative costs of vocational and secondary education. There were methodological problems with this approach, which may be overcome through a greater refinement of technique. The Michigan State Advisory Council has funded further work on this problem.

¹⁵ Report of Local Educational Agency on Educational Goals for Massachusetts
Boston: Commonwealth of Massachusetts, Department of Education, 1972.

¹⁶ Alvin R. Voelkner and Harvey T. Ollis, The Economic and Non-Economic Evaluation of Vocational Education 1971.

Another source of guidance for developing a statewide evaluation plan is Nerden's article on the subject, which appears in Contemporary Concepts in Vocational Education: The First Yearbook of the American Vocational Association.¹⁷

Nerden presents a chronology of evaluation that gives special emphasis to the use of outside resources in the evaluative process.

1. Consulting Committee

First, there is the very obvious urgency that each state director or leader of the statewide vocational education activity assemble, in keeping with sound vocational education practice, a consulting committee concerned with all aspects of program evaluation. The responsibility of this committee should not be confused with those of the State Advisory Council on Vocational Education.

2. Broad Representation Outside of Education

Employers, representatives of labor and management should also be included in the evaluation consulting committee.

3. Regional and Local Involvement

Once the consulting committee has made some tentative decisions concerning how best to proceed, every effort should be made to move operational aspects of the activity to the regional and local situations. Efforts to involve all teachers, local supervisors and local administrators in the evaluative process and specifically in the development, try out, and subsequent modification of guidelines, criteria and procedures.

¹⁷Joseph Nerden, Statewide Evaluation of Vocational Education, Contemporary Concepts in Vocational Education: The First Yearbook of the American Vocational Association, ed. Gordon F. Law Washington, D.C.: American Vocational Association, 1971.

4. Synthesizing Results

Assuming that every individual involved in vocational education has had ample opportunity to participate in the development, preparation and/or modification of guidelines, criteria and procedures to be used in evaluation, the next major step is to assemble the collective judgments of the regions and areas of the state and to synthesize the results so that they represent consensus as nearly as possible and eliminate duplication and inconsistencies. Throughout the statewide activity, domination or restrictive influence by State Department of Education supervisory or administrative staff must be avoided. By keeping its involvement strictly limited to leadership, assistance and advice, the State staff may best assure itself of a successful venture in evaluation.

5. Setting Priorities and Providing for Change

Following the development of valid and reliable instruments for evaluating vocational education, a variety of self study, visitation, collaboration, priority setting and follow-up activities must take place.

A conference report of the National Institute on Improving Vocational Education Evaluation makes the following recommendations for the improvement of evaluation:

1. It is urgent that state departments and local school systems begin to cooperatively and carefully plan for the collection of data needed to evaluate existing programs and plan new ones.
2. It is equally urgent that persons at all levels seek to improve available evaluative techniques as well as to develop new and better ones.
3. Evaluation efforts need to be coordinated in order to avoid unnecessary duplication.
4. The implications of the 1968 Amendments for evaluation are many and complex requiring that we learn and implement those procedures and techniques that will most efficiently aid the decision making process for the attainment of local, state and national objective.

5. Evaluation is a challenge to all persons involved in vocational education.¹⁸

These recommendations have been adhered to in the development of the Three Phase System; but if one concludes, as is appropriate, that the development of a *fully comprehensive system* has not been achieved in Illinois, the recommendations are still pertinent.

Summary

This investigation revealed strong support for continued use of the Three Phase System. Both educators and non-educators judged the System to be valuable and worth the effort that it requires. An important aspect of the System is that it is designed to produce and deliver large quantities of information that is useful and necessary for its own modification; it can for this reason be rated highly self-reactant and capable of modification. It has produced changes in local plans from one year to the next, and possesses a functional feedback loop that involves the Program Approval and Evaluation Unit, other units of the DVTE, and local education agencies. Therefore, a major strength of the System is that information is periodically obtained that can permit the evolution of a more effective form of evaluation.

But the System produces discrepant information. In the composite ratings that are prepared from site visitations, agency personnel receive consistently high ratings at the same time that Resources Utilized, which must be linked to personnel performance, is negatively related to the

¹⁸ Guide to Improving Vocational Education Evaluation, Summary of the National Institute on Improving Vocational Education Evaluation on August 4-8, 1969 (Fayetteville, Arkansas: Arkansas University, College of Education, 1970).

financial needs of agencies; this suggests that a serious personnel deficiency may go unrecognized by visitation teams. A consistently negative relationship between financial needs and ratings suggests that, if composite ratings reflect "local potential achievement", proportionately higher support should perhaps be given to poorer agencies than is currently being allocated. Of course, since no information exists to establish that local potential is realistically considered when ratings are made, this conclusion cannot be strongly made. Indeed, because of lack of information about how these adjustments are made by visitation teams, composite ratings have limited established validity.

Planning activities of agencies have numerous deficiencies. Some deficiencies may arise in part because documents prepared by the Division to guide planners lack the kinds of specificity and elaboration that would make planning easier. However, other types of assistance are also needed. Half or more of the respondents to one of the questionnaires distributed in this study agreed or strongly agreed that their planning activities would have been more successful had they been given additional external help to:

1. Conduct student follow-up studies.
2. Conduct needs surveys in their communities.
3. Conduct employer need surveys.
4. Prepare behavioral objectives.
5. Conduct effective evaluations.
6. Identify job entry skills of students.
7. Set priorities for program development.

The Division currently provides some assistance in each of these areas and cannot be faulted for not being fully helpful in each, but it is obvious that a very great amount of assistance is needed by local agencies if they are to become more effective in their own evaluation efforts. In particular,

they will need assistance in skills assessment if comprehensive statewide evaluation is to be highly effective. Their other needs for assistance link to, and are generally dependent upon, improved skill assessment if they are to be met.

Without a large amount of output information, accountability is not possible and evaluation must be judged to be seriously defective. Accountability requirements, in the case of occupational programs, call for intensive attention to coordinated work placement efforts. These efforts are to be built upon product performance feedback to educational agencies. The feedback that is required should describe, among other things, how the skills of program graduates related to their work settings. A large amount of this type of output information is basic for accountability requirements.

The Three Phase System, as developed and implemented in Illinois, does not emphasize assessment of the output of programs. Instead, under the tacit assumption that if conditions are present outcomes will result, the System concerns itself with the contents of plans submitted by agencies and what can be learned from site visitations keyed to traditional process concerns. These types of information cannot, however popular the System may be at this time, firmly establish the value of programs to their graduates. Without assessment of the skills graduates possess and need to use when employed, this and other similar evaluation systems must be judged to be critically deficient.

Development of a fully comprehensive evaluation system has not been achieved in Illinois. Cooperation between the different agencies is still needed and coordination is required. This coordination should, it must be noted, extend beyond the boundaries of individual states and incorporate

concern for what states can do together. Therefore, just as the Illinois System has already benefited from information developed elsewhere and is currently inviting future multi-state efforts, a major need for future comprehensive system development in Illinois cannot be met without formal attention given to that need.¹⁹

¹⁹A Request for Proposal was issued by the Research and Development Unit for development and testing of a "Systematic Approach for Implementation of a Statewide, Student Based, Management Information System." The time frame for this development extends from November 1, 1972 to June 30, 1973.

RECOMMENDATIONS

It has become common practice for persons making recommendations for the development of evaluation procedures to advocate that a complete systems approach be applied during their preparation. Indeed, if such an approach to evaluation is not taken, some writers are inclined to strongly condemn what is being done and to label it grossly or totally inadequate. This tendency in current thinking about evaluation, when used in company with earlier precedents of labeling evaluations that do not assess program outputs as useless, can lead to totally negative criticism of any evaluation procedures that are adopted for present day use. If these standards are the only ones applied to the Three Phase System, it would be necessary to conclude that it is suitable for some purposes of local planning but of no substantial value as a statewide evaluation device.

Dyer has recognized deficiencies of present day evaluative systems and suggested a position from which to review them. He stated:

One could go on endlessly elaborating the kinds of information required to make an educational system genuinely responsive to the needs of the students and the times, present and future, and thereby one would demonstrate beyond a doubt that the whole idea is fantastic and wildly unrealistic and completely beyond the realm of human possibility. Of course such complex varieties of feedback are unavailable to us now; the kinds of instrumentation necessary to make them available, with respect to both inputs and outputs, are still crude despite the work that has gone into them over the last 50 years or so. But this is no reason for not trying to imagine what an ideal feedback system in education would be like and for doing whatever can be done to realize it in practice as best we can.¹

¹Henry S. Dyer, The Role of Evaluation in School Systems. Talk given to New Jersey Association of School Administrators, September 22, 1971 (Reprint: Educational Testing Service).

This report has been prepared with the intention of avoiding excessively negative criticism based upon theoretical considerations for which there are now no expedient means of implementation. For example, proven competency-based assessment devices for statewide evaluation of student performance do not now exist. Nor has any state or local education agency successfully developed and installed a fully comprehensive system! Therefore, while it is necessary to keep firmly in mind that the Three Phase System is critically deficient when compared against idealized standards and to avoid encouraging its users or those who learn about it to conclude it can be retained or adopted without need for constant revision and adjustment, the system must not be excessively criticized and condemned. Both strengths and deficiencies of the system must be recognized with the intention that its strengths be retained and remedies sought for its deficiencies through an evolutionary process. More ideal evaluative arrangements should be sought as rapidly as they can be developed. The recommendations of this report are presented with the intention that they may provide useful direction toward short and long range evolutionary development of a more ideal system.

The effectiveness and efficiency of an evaluation system are importantly dependent on the accuracy and completeness of statements of goals and objectives of the organization being evaluated. Statements of goals and objectives in turn largely determine the information requirements to be met by an effective evaluation system. It was noted previously that statements of objectives for the Division (whether directly referred to as objectives or noted as "goals," "purposes," or otherwise) were so numerous as to be impossible to work with except in a summary condensation. A total of thirteen information needs were subsequently prepared against which the effectiveness of the Three Phase System might be judged. The recommendations of this report have been prepared as a

result of crosschecks of the performance of the Three Phase System against the summarized information needs of the Division. They are organized into groups on the basis of whether or not the action that would be required would be of long or short duration and are presented with additional remarks designed to clarify their intended meaning.

Long Range Recommendations

The Three Phase System has as its major deficiency lack of information about job entry performances of students who complete occupational programs. This weakness exists at the center of a cluster of closely related information deficiencies all of which urgently require attention if statewide evaluation is to be made comprehensive. What jobs are available? What placement successes have students had? What skills are needed to perform well on jobs? How satisfied are students and employers with the preparation provided in occupational programs? All of these questions have concern for the outputs of programs. Lack of success at assessing outcomes is the primary deficiency of the Three Phase System. Ultimately, evidence of program effectiveness must be sought and reasons for program planning and modification must be assembled. This will require long range development in the three areas that follow.

1. *A four-year plan for performance assessment should be initiated.*

The primary deficiency of the Three Phase System is that it has lacked really productive concern for job entry skill assessment and for the questions which relate to it. A very good reason for not having an operational performance assessment program is that its development costs would have far exceeded those for the Three Phase System. However, at the same time that some task analysis projects have been initiated in Illinois (the Lincoln

Land Community College project is illustrative. Other skill assessment projects have been initiated about the country such as Project Career in Massachusetts. Conceptual work by Loch³ which was described earlier placed this type of assessment within a broad framework for comprehensive evaluation; work by Thornton and Wasdyke⁴ on criterion referenced testing also shows good promise for effective development of skill assessment practices.

The selection of a four year cycle for performance development assessment by the DVTE is arbitrary but meant to make known the amount of time that may be required to develop such an approach. Provus,⁵ in Discrepancy Evaluation broke a typical assessment down into the following approximate levels which, when applied in Pittsburgh, Pennsylvania, and other cities, took about one year per level or stage:

- Level One: Educational Goal Definition
- Level Two: Translation of Goals to Measurement Objectives; development and/or collection of applicable instruments
- Level Three: Data Collection
- Level Four: Statement of Needs (Discrepancy existing between Goals and Student Assessment Performance).

The levels used by Provus may not be equally suitable to Illinois but it is important to note that the four year time interval was partially tested in these efforts.

²John G. Nee, The Identification and Comparison of the Tasks for the Occupational Role of Industrial Production Technologist. Lincoln Land Community College, Unpublished paper, July 1972.

³Charles Loch, Model #3 - Vocational Education: Emphasis on Career Development. Memorandum dated September 23, 1971.

⁴Richard F. Thornton and Raymond G. Wasdyke, The Development of Criterion Referenced Tests Using the Behavioral Consistency Model. TDM-72-August, 1972: Educational Testing Service, Princeton, New Jersey.

⁵Malcom Provus, Discrepancy Evaluation for Educational Program Improvement and Assessment. Berkeley, California: McCutchan Publishing Corp., 1971.

The evolutionary development of a new output-focused evaluation system for the Division might, it must be noted, follow along lines where site visitation becomes more and more keyed to output assessment. For example, visitation teams might over time become involved in the field trial of performance assessment studies. It is unlikely that this approach should be attempted on more than one or two curricula for which a large student population is involved and assessment is judged most feasible. Certainly, it would not be possible to initiate this approach in all occupational areas at one time.

Equally certain is that this type of development would require collaboration with external agencies. It is for this reason that establishment of a Technical Advisory Committee is recommended as part of the short range actions in the next section. No single state can afford the expense of developing this type of system. Indeed, even a consortium of states and agencies will have difficulty doing so. Therefore, it is critically important that the Division seek to avail itself of all information and opportunities open to it. Collaborative development with other agencies seems to be the only approach that can keep costs within the limits that exist in Illinois. The development of the National Occupational Competency Testing Program, which itself has potential value for the determination of the competency of teachers illustrates the benefits to be found in cooperative development programs.*

2. A continuous effort should be made to improve supply-and-demand studies.

The Three Phase System has been designed with the assumption that local education agencies should undertake much of the work necessary to determine what opportunities will exist for its students and to achieve a fit between the opportunities that exist and the educational programs designed for them. It

*This project is now in its developmental phase; Carl Schaefer of Rutgers State University of New Jersey is currently project director.

is true that local agencies are expected to use information given them by the employment services and other groups. But the information those groups have provided to date is not good enough to permit the local agency to closely tune its curriculum to opportunities.

This problem is also one that is too great for local agencies and, perhaps, even for states to meet. Changes in employment patterns in Chicago and its suburbs have, for example, recently resulted in a condition where the dominant transportation pattern for work has switched from a suburb-to-city flow to a city-to-suburb flow. It can easily be seen that such forces as industrial plant development, changes in consumer demand, and national and international economic development are far beyond the capabilities of restricted areas to understand or sense. These forces produce demands for regional, state and national study. They also require high levels of cooperation among agencies and competent long range planning. Clearly, the potential effectiveness of the Three Phase System has been severely restricted by lack of this type of information.

3. *Formal, continuing efforts should be made to improve comprehensive evaluation and development.*

Comprehensive planning for statewide evaluation of programs may be initiated through the use of a half-dozen or more guidelines. The guidelines will seem idealized and impossible of attainment in the short range. Indeed, they may be so general as to discourage some groups from attempting to approach them. However, their intended purpose is not to set standards for immediate attainment but rather to enable planners to establish long range goals some of which will be easier to attain than others but all of which will require persistent attention over years. Six guidelines follow; each is accompanied by a brief description of why it is included:

Guideline I: Mechanism for Establishing Statewide Goals and Priorities for Vocational-Technical Education

Responsibility for establishing statewide goals is shared by many groups within the state. Any differences in either philosophical or programmatic goals should be resolved as part of initiation of a system of statewide evaluation.

Guideline II: Administrative Organization for Statewide Evaluation

If evaluation is to be a continuous process, it must be built into the fabric of the state administrative structure. This means that an appropriate staff organization with funds necessary to function must be provided.

Guideline III: Budget Provisions for Statewide Evaluation on a Continuing Basis

Since evaluation should be a continuing process, not a one-shot endeavor, budget provisions should be made on a continuing basis.

Guideline IV: Comprehensive Plan for the Evaluative Process

A comprehensive plan for statewide evaluation should show (a) major and minor objectives; (b) concern for all institutions, agencies and offices involved; (c) proposed evaluation processes and procedures, complete with a detailed accounting of the purposes for evaluation components; (d) the way each evaluation component will work; and (e) in plain words, how evaluation data will be used.

Guideline V: Feedback Mechanism for Quickly Identifying Problem Areas

If we accept the idea that good evaluation is a dynamic, continuing process, it is imperative that feedback mechanisms for improving both the evaluation system and the statewide vocational technical education system it purports to analyze are incorporated into the system. It must be clear that major objectives should not be subject to constant change. However, the various indicators, processes and criteria for measuring such elements as quality, accessibility, diversity, provisions for disadvantaged, and opportunities for career development

as a life-long process are the life-blood of evaluation; they should not remain static.

Guideline VI: Administrative Mechanism for Analyzing Data and Affecting Necessary Changes

The worst thing that can happen to a carefully developed evaluation report is to have its recommendations ignored or lost in bureaucratic processes. Whenever an evaluation system is designed, it is very important that the results of the evaluation will be transformed into specific plans of action by specific offices of the State and by Local Education Agencies. At the present time the Three Phase System does not have input in the total planning system for Vocational-Technical Education in Illinois. This guideline is therefore particularly important for this state.

Short Range Recommendations

Both long and short range recommendations have been prepared with the assumption that implementation would occur within a half year. The difference is that short range recommendations may be met within a year while long range recommendations cannot possibly be attained in that time.

1. *Establish a technical advisory panel to advise on the evolution of a more output-centered system. The committee might have a half-dozen members with most from out of state and involved in state level evaluation. The charge of the committee would be to recommend changes in the current system through research and development.*

The purpose of an advisory panel, as thought of in this report, is to formally provide for external guidance and long range development. The development of competency-based evaluation, improved supply and demand studies and adoption of comprehensive evaluation practices emphasizing output should not be undertaken without outside consultation. The consultation should be independent of any existing power structure or vested interest and should be of

national stature. Its members should be selected for the specific knowledge they hold about comprehensive assessment problems faced by the Division. Five or six members might be sufficient with a rotating membership in use over the years. Rotation would be preferred so that new members (three per year on a six member group) could be brought in as new technical problems are identified.

Four meetings might be appropriate the first year. The charge that would be given to members when first brought together would be to address themselves to the task of advising for successful initiation of long term actions of the preceding section. A first meeting might cover three days after which subsequent meetings might take less time. The group would select its own chairman with the understanding that 2 of 5 or 3 of 6 members would be replaced at the conclusion of the first year by individuals selected for specialized knowledge needed in the second year. No member would be retained beyond the three year interval in order to assure that the committee would both retain capacity for renewal and continuity in its efforts.

2. *Fiscal audits should be rapidly pursued so that agencies will no longer experience as many discrepancies as have appeared in the past.*

Fiscal audits have lagged well behind current operations. The type of audit that is undertaken is not sufficient to establish financial accountability for the pooling of resources toward needy areas but it has served to make agencies aware of their responsibilities for financial accountability and has revealed that procedures in use prior to the adoption of the Three Phase System were inadequate. Therefore, this activity should be continued and speeded up, although this recommendation should not be construed to mean that all agencies should be audited each year. On the contrary, because some agencies are very small this activity would not be cost beneficial. A cost beneficial but fully current audit should be sought.

3. *Profile analyses should be conducted for each new round of evaluation reports. Evidence of low variability and lack of discrimination should be sought in these analyses.*

It was noted in this study that composite ratings for personnel lacked variability; no evidence arose from analyses of profile data to suggest systematic biases were induced by team leaders. Strengths and weaknesses of the composite rating system are partially assessable by the types of analyses that were undertaken for this study. These analyses should be repeated and improved over time.

It can be seen that the rating currently given to personnel may have little validity (what does it mean for 85 percent to be rated "above average"?) as an indicator of program effectiveness and may serve largely as a means for complimenting staff members and thus assuring acceptance of the visitation system. Unless this and other rating categories possess variability they should be eliminated from further use.

Also, it is important to continue to be alert to the possibility that the visitation system may experience deterioration in its existing effectiveness because of continued use of visitors who live near to the agency being visited. Profile analysis can give clues to the possibility this is happening. It can also regularly reveal relationships among ratings for different types of agencies, sizes of teams visiting them, and other variables.

4. *The follow-up of students who have been enrolled in programs should receive greatly expanded emphasis; follow-up should be closely tied to the Three Phase System.*

The Three Phase System has been operated from an underlying assumption that if certain conditions judged to be important for an effective program are present the output from the program will be satisfactory. The presence of qualified teachers, up-to-date equipment, a good curriculum, et cetera would, it has been assumed, produce graduates who have marketable entry level skills and who will make desirable employees, while schools lacking in these attributes will produce

less competent and less desirable employees. Actually, without extensive follow-up of students there is no way of knowing whether there is any important relationship between the process variables and the real life criterion of on-the-job effectiveness. Therefore, it is important to know what happens to students (preferably all of them) after they leave school as dropouts or with Diplomas. Follow-up should provide information for at least three and preferably five years from course completion.

Follow-up instrumentation should ask students to evaluate their educational experience. They should be asked to identify skills they found most valuable and to indicate how effective their schooling was in teaching them. Their supervisors should be asked for evaluations of the performance of former students, especially regarding areas in which their training was inadequate. Employers should also be asked to describe the work habits and attitudes of former students as they compare with those desired in responsible workers. Collection of this information should, if at all possible, be made an integral, mandatory feature of evaluation with summary information provided to the Advisory Council, the state agencies, and individual schools.

The follow-up procedures that were prepared for pilot use by the Center for Educational Studies at Eastern Illinois University include many of the features that should be found in good follow-up instrumentation. However, it is not enough just to produce potentially useful items and procedures. The audiences to whom the instruments are addressed must include both students who have completed programs and those who have not. Furthermore, it is necessary to carry out special studies if overall response rates are poor or if some types of students are more difficult to follow than others. Clearly, this service is one that should be sponsored at the state level.

5. *Improvements in the software of the system should be sought. In particular, the instructional sections of the Criteria and Guidelines documents should be considered for simplified revision.*

The versions of these documents that were in use during Fiscal Year 1972 were brief and could not be easily understood or used. Descriptions of the allocation of funds are, for example, difficult to fully interpret. This is partly caused by use of two regular scales to describe reimbursement practices which actually followed a single irregular scale. Improvement of these documents will probably require close working relationships with local agencies.

6. *A strenuous effort should be made to overcome the unduplicated-duplicated count problem of student accounting.*

It should be possible to adopt, modify or develop a procedure whereby educational agencies would be able to complete but one set of records, as for example course registration cards from which both state and federal reporting requirements could be met. If necessary, alterations should be sought in state and federal reporting requirements.

7. *More formal procedures should be sought for decision-making within the DVTE so that evaluative information can be better used.*

Management procedures of the Division have not formally provided for inclusion of Program Approval and Evaluation Unit information in the decision-making activities of the Division. For an evaluation system to be comprehensive and effective it is necessary that it be formally designed to formally respond to the information needs of the Division. A fully comprehensive system cannot be developed without this type of involvement at the Division level nor can existing strengths of the present system be most effectively used without it. Of course, the Administrative Planning Council of the Division has been the location where formal consideration of the role evaluation might have been expected.

Summary

The Illinois Three Phase System should be temporarily retained as an administrative tool to be used in relationships between the Division of Vocational and Technical Education and local education agencies. But it is clear that such a system, with its scope directed toward local school districts and with its lack of outcome assessment and related state priorities, should not be considered as a fully satisfactory vehicle for statewide evaluation. It is not necessary to do additional research to recognize that the greatest need for improvement and modification of the System is for improved, fully comprehensive follow-up procedures. Therefore, there is great need for progress in the area of performance assessment for students who complete programs. Because the Three Phase System as it has been developed and implemented is in many respects a model of how to get the greatest good from visitation procedures, and because the individuals responsible for its use have actively sought and built into its design procedures by which it can be changed, one cannot recommend that current uses of the System be suddenly and markedly changed. A supplemental development program is needed. The development program should lead to progressive modification of the present System with the goal of ultimately replacing it with a more comprehensive output-focused system. Improved performance assessment and follow-up should be the cornerstones of a modified system.

APPENDICES

APPENDIX A

SEQUENTIAL DEVELOPMENT OF THE THREE PHASE SYSTEM FOR STATEWIDE EVALUATION OF OCCUPATIONAL EDUCATION PROGRAMS

The following outline is a brief time table of activities that occurred in the development of the Three Phase System for State wide Evaluation of Occupational Education Programs with the primary emphasis on Phase Three from July 1970 through May 1972.

1969 - DECEMBER

Workshop on Refining Phase I (1 and 5 year Local Plan for Vocational-Technical Education).

1970 - JANUARY TO MAY

Three Phase System for Evaluation formulated and directions established for further development.

JULY

Workshop to receive suggestions and recommendations from Local Agency personnel in developing Phase Three (on-site evaluation).

AUGUST - OCTOBER

a. Developed objectives utilizing Delphi Technique (Rand Corporation). Participating Groups:

1. Business and Industry
2. Educators

b. Phase Three specifics drafted.

NOVEMBER

Reaction workshop to receive assistance in formalizing specifics of Phase Three

1971 - JANUARY THROUGH MAY

Field test of Phase Three

Sites: Mattoon High School
Centralia High School
Valmeyer High School
Pekin Area Vocational Center
Joliet Jr. College
Orion High School
Proviso Township High Schools

JULY

Reaction workshop for Field Test participants to finalize Phase Three for full implementation during pilot year 1971-72.

AUGUST

Develop Evaluation materials

SEPTEMBER

Workshop for on-the-job training of team leaders.

1971-

1972- OCTOBER - MARCH

Conduct 72 Local district evaluations and monitor the Three Phase System through followup of team members and districts evaluated.

APRIL

Tabulate evaluation data

MAY

Workshop for representative team members to interpret evaluation data gathered and discuss recommended changes for System refinement.

JULY THROUGH AUGUST

Refine the System for the 1972-73 school year.

APPENDIX B

ON-SITE EVALUATION INSTRUMENT
(Team Leader Form)

1. What are some specific strengths of the administrative organization as it relates to occupational education (Cite several strengths)

2. What are some specific weaknesses of the administrative organization?

3. How many years has the present organizational structure been in existence?
 ___ years.

4. How would you (as a team) rate the extent of the dissemination of career information in the district?
 - ___ a. High. A definite coordinated effort between the counseling and instructional department exists.
 - ___ b. Average. Some career information is disseminated to students.
 - ___ c. Low. Very little is being done with regard to dissemination.

5. Are the Local Plan Objectives measureable?
 - ___ a. Yes. They are definitely stated in measureable terms.
 - b. Almost. The objectives approach measureability but are somewhat global or general in scope.
 - ___ c. No. The objectives are not stated in measureable terms.

6. Does the school have a locally-directed evaluation system?
 - ___ a. Yes. A system exists which enables evaluation of the total occupational program.
 - ___ b. No. An organized system does not exist other than testing done by teachers or evaluation of staff members conducted by the administrators, etc.

7. If "yes" to 6, what groups of individuals are involved in the local evaluation system?
- a. Students
 - b. Teachers
 - c. Administrators
 - d. Counselors
 - e. Advisory committee members
 - f. Employers
8. What is the administration's estimate of the percentage of graduates who complete four years of college?
- ___ percent.
9. What significant changes in program offerings have occurred within the past two years?
10. What is the total number of students enrolled in a cooperative program? (D.E., D.O., O.O., C.W.T., etc.)
- ___ students.
11. How would you rate the cooperative programs of the district?
- a. High. A very extensive and comprehensive program is being offered.
 - b. Average. A program exists but is not serving all who could benefit from such an experience.
 - c. Low. A minimal program exists which should be further developed and refined.
12. Is occupational information provided in elementary and other levels of feeder schools?
- a. Yes. Most feeder schools are providing occupational information to students.
 - b. Some. Only some of the feeder schools are providing occupational information to students.
 - c. No. None of the feeder schools are providing occupational information to students.

13. How many years has the administrator in charge of occupational education held that position within the district?
- ___ years.
14. How would you rate the effectiveness of existing occupational student organizations within the district?
- ___ a. High. Most organizations are effective in student development.
- ___ b. Average. A few of the organizations are effective but most are minimally effective.
- ___ c. Low. Organizations are very limited in membership and attendance.
15. Does the district actually identify disadvantaged and handicapped students as stated in the Local Plan?
- ___ a. Yes.
- ___ b. No.
16. Does the district serve disadvantaged and handicapped students as stated in the Local Plan?
- ___ a. Yes.
- ___ b. No.
- ___ c. In some cases.
17. Are local community personnel involved in planning local programs?
- ___ a. Yes. In most occupational areas.
- ___ b. Limited to only some areas.
- ___ c. No. Very few or none are involved.
18. Rate the extent to which occupational programs utilize available community resources.
- ___ a. High. School personnel utilize community resources extensively.
- ___ b. Average. School personnel utilize community resources on a limited basis.
- ___ c. Low. School personnel do not utilize community resources.

APPENDIX C

Enrollment K-8 _____
9-12 _____
Post-Sec. _____
Cont. Ed. _____

WORK SHEET

Local 1-Year and 5-Year Plans
for Vocational and Technical Education (19 - 19)

Region _____ County _____

SECTION A

General Information

Legal Name of District _____ Dist. No. _____
Plan Author Name _____ Superintendent _____
Address & Telephone _____

SECTION B

Administration Organization

AVC

JOINT AGREEMENT

SECTION C

District Policies, Goals and Objectives

1. Objectives (Measurability _____)

- ____ A. Proposed Program
- ____ B. Curriculum Emphasis
- ____ C. Articulation

Special Organization:

2. Meeting Student and Community Needs

- ____ A. Course Descriptions
- ____ B. Criteria Listing
- ____ C. Multipliers Claimed
- ____ D. MDTA ----- Special Contracts

Initial Program:

3. Use of Community Resources

- ____ A. Resources (Internal & External)
- ____ B. Resources Facilitate Objectives
- ____ C. Type, Role, Function of Advisory Council

Handicapped:

4. What Ancillary Services

- ____ A. Vocational Guidance & Placement
- ____ B. Student Organizations

5. Evaluation of Proposed Program

- ____ A. Criteria
- ____ B. Who Will Evaluate
- ____ C. Relationship With 1 (Objectives), 2 (Target Groups)

6. Improve Quality

- ___ A. Program Improvement (All)
- ___ B. Progress Toward Full Approval

7. Improve Quality -- 5 Years

- ___ A. Program Innovations
- ___ B. In-Service
- ___ C. Facilities
- ___ D. Joint Agreement
- ___ E. Area Resources
- ___ F. Summer Programs
- ___ G. Elementary Program Approved
- ___ H. Summer Program

Disadvantaged:

SECTION D

Annual Plan and Approval

Year	Industrial Oriented	Health	Ag. & Applied Biol.	Business Mktg. & Mgmt.	Personal & Public Serv.
Previous Year					
This Year					

Credit Courses:

Non-Credit Courses:

SECTION E
Long-Range Plan

Credit Programs

Non-Credit Programs

Per Credit Cost=\$

SECTION F

V. E. Reimbursement from State=\$

%Credit =

SECTION G
Summary

% Non-Credit=

SECTION H

Status of Local Plan

APPENDIX D

STATUS OF PLAN REPORT

School Name _____ Approved _____

District Number _____ Conditionally Approved _____

Not Approved _____

Enrollments are projected in the following areas:

Industrial Oriented _____ Health _____ Agriculture and Applied Biology _____ Business Marketing and Management _____ Personal and Public Services _____

On pages VE-4 and VE-6 in column 17 of the Plan those courses that appear to meet the minimum criteria for funding as outlined in the State Plan, and according to the State Board policy have been so indicated, using the following categorical codes (Numbers are used for identification purposes only) (LETTERS ARE FOR PROGRAM FUNDING PRIORITIES)

Occupational Training-----	1	Highest Priority-----	A
Occupational Related-----	2	Above Average Priority-----	B
Occupational Preparation and Orientation-----	3	Average Priority-----	C
Occupational Information-----	4	Below Average Priority-----	D
Not approved for funding-----	N/A		

Review Comments:

Section C, questions 1 thru 5, have been judged to be acceptable until the district has on-site DVTE evaluation. Only a duplicate of this portion of Section C with modifications need to be submitted annually until further notice. Questions 6 & 7 needs to be revised annually.

Section C was judged to be unacceptable for the following reasons: _____

Other Review Comments: _____

Additional information is requested on the following to be submitted within ten days of receipt of this mailing:

When submitting claims for reimbursement, meeting the legal as well as regulatory requirements of Federal and State Laws, Office of Education, and the Division of Vocational Education are the responsibilities of the local agency. Local agencies will be audited to determine proper accounting of programs, students, credits, as well as funds. The submission of erroneous or improper information may jeopardize current and/or future claims of the local agency.

APPENDIX F

SCHOOL AND COMMUNITY DEMOGRAPHIC DATA

1. Legal Name of your District _____
2. Do citizens from your community serve on a district occupational education advisory committee? Yes ___ No ___
 - a. If yes, is there:
____ one advisory committee for all occupational areas, or
____ separate committees for each area? (List the separate occupational areas having advisory committees.)
 - b. How many meetings are held each year? _____
 - c. Are minutes of the meeting(s) available for review by the visitation team members? Yes ___ No ___
3. Are there active vocational student organizations in the school?
Yes ___ No ___
If yes, list the name of the organizations and the number of students involved in each.

Name of Organizations	Number of Students Involved
4. What is the current unemployment rate for your area as designated by the Illinois State Employment Service? _____
5. What is the current youth unemployment rate for your area as designated by the Illinois State Employment Service? _____

6. Provide the current unduplicated enrollment for each of the occupational areas by grade level. (Make sure that a student is not counted in more than one class.)

	Health	Industrial Oriented	Applied Biol. & Agriculture	Business & Marketing Mgmt.	Personal & Public Service	total
9th Grade						
10th Grade						
11th Grade						
12th Grade						
total:						

7. What tests are currently utilized in your school under the following areas?

a. Interest Name of test(s) When given, and to whom

b. Aptitude

8. What was last school year's dropout rate for all high school students? (Dropout rate is equal to the percent of all school leavers other than transfers) _____

9. Does your school have a specific counselor designated as vocational? Yes ___ No ___

10. Does your school provide placement services for:

- a. Current graduates Yes ___ No ___
- b. Dropouts Yes ___ No ___
- c. Former graduates Yes ___ No ___

11. Does your school have a follow-up program that gives a picture of your entire student body? Yes ___ No ___

Only vocational students? Yes ___ No ___

If yes:

- a. How often are follow-up studies conducted? _____
- b. Who is responsible for coordinating the follow-up study? _____
- c. Are the results of follow-up studies disseminated to the instructional staff? Yes ___ No ___

**APPENDIX G
EVALUATION LOG**

FISCAL YEAR:
CODE NUMBER:
TEAM LEADER:

_____ DISTRICT NAME

TEAM MEMBERS	TEAM MEMBER REQUEST LETTER	TEAM MEMBER RESPONSE (PHONE NO.)	VISITATION DATES	
			ORIENTATION DATE	
			LETTER TO ESR	
			LETTER TO DISTRICT	
			NOTIFICATION LETTER	
			MAILING OF INFORMATION	
			FOLLOW-UP LETTER	
			REPORT MAILED	
			TRAVEL VOUCHER	



Appendix H

ETS Questionnaire on Profile Ratings
for Team Members Who Visited Educa-
tional Agencies in 1971-72

STATE OF ILLINOIS

ADVISORY COUNCIL ON VOCATIONAL EDUCATION

222 SOUTH COLLEGE
SPRINGFIELD, ILLINOIS 62706
PHONE 217-525-2592

RICHARD B. OGILVIE
GOVERNOR

September 11, 1972

WILLIAM E. NAGEL
EXECUTIVE DIRECTOR

Dear Visitation Team Member:

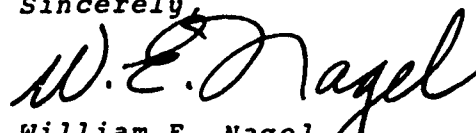
This past year you participated in the on-site evaluation of one or more occupational education programs in Illinois. Each visit was on part of the Three Phase Evaluation System sponsored by the Division of Vocational and Technical Education and resulted in an Evaluation Report which was submitted to and discussed with the agency you visited.

The Illinois Advisory Council on Vocational Education, for which I am Executive Director, is appointed by the Governor in accordance with Public Law 90-576. Its thirty-four members are drawn from business, industrial, educational and other fields and is representative of the different geographic regions of the State. We are charged with responsibility to submit an annual evaluation report describing the effectiveness of federally assisted vocational programs to the U. S. Commissioner of Education and the National Advisory Council.

This year we have contracted with Educational Testing Service to help us learn how effective the Three Phase Evaluation System has been. This letter introduces Educational Testing Service. We request that you assist them in their work by responding, in accordance with your best judgment, to the questionnaire that will accompany this letter. Please be assured that your responses will be of real use to us and that your individual responses will be kept confidential.

Thank you for your kind assistance.

Sincerely,


William E. Nagel
Executive Director

QUESTIONNAIRE ON PROFILE RATINGS
for
Team Members who Visited Educational Agencies in 1971-72*

Dear

Our records show that in _____ you participated in a visit to:

The Occupational Program Performance Profile that resulted from that visit is presented on the following page. I would like to ask you several questions about the rating process as well as about the final profile ratings.

- A. How were the ratings derived? Were they primarily arrived at through "informal discussions" leading to agreement or through a "formal rating" procedure involving the pooling of numerical ratings by individual team members? (Circle one number)

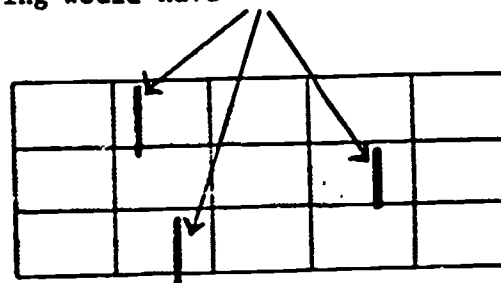
		<u>Ed.</u>	<u>Non-Ed.</u>
Informal discussions	1	51%	62%
Formal ratings	2	44%	34%
No response		5%	3%

- B. Please consider all of the eight performance profile categories as a whole. How do these profile ratings compare to the ratings you would have assigned as an individual? Overall are the ratings higher, lower, or similar to those you would have assigned? (Circle one number)

		<u>Ed.</u>	<u>Non-Ed.</u>
Higher	1	8%	10%
Lower	2	7%	8%
Similar	3	82%	79%
No response		2%	3%

- C. From what you remember, how would your individual ratings on each of the eight performance profile categories have compared with those presented in the final profile ratings on the following page? Mark the attached profile as illustrated below by drawing a line through each bar to show where your individual rating would have been.

Administrative Organization
Personnel
Objectives



*148 questionnaires were mailed. Percents are based on the responses of the 118 individuals whose questionnaires were returned by November 1, 1972.

Total Occupational Program Performance Profile

			<u>Educators</u>	<u>Non-educators</u>
Administrative Organization				
	Higher	1	12%	21%
	Lower	2	37	38
	Similar	3	35	16
	No Response		16	24
Personnel				
	Higher	1	21%	8%
	Lower	2	32	31
	Similar	3	32	33
	No Response		16	28
Objectives				
	Higher	1	11%	26%
	Lower	2	37	18
	Similar	3	35	30
	No Response		18	26
Evaluation				
	Higher	1	12%	21
	Lower	2	26	13
	Similar	3	40	36
	No Response		21	30
Occupational Programs				
	Higher	1	14%	21%
	Lower	2	30	25
	Similar	3	39	30
	No Response		18	25
Resources Utilized				
	Higher	1	18%	16%
	Lower	2	28	33
	Similar	3	35	30
	No Response		19	21
Guidance Services				
	Higher	1	18%	11%
	Lower	2	42	34
	Similar	3	23	26
	No Response		18	28
Students Served				
	Higher	1	14%	5%
	Lower	2	30	30
	Similar	3	37	34
	No Response		20	31

D. Do you believe that the agency you visited was making a satisfactory effort to: (Circle one number for each item)

		<u>Ed.</u>	<u>Non-Ed.</u>
Determine what skills its students need	Yes 1	53%	70%
	No 2	46	28
	No Response	2	2
Have up-to-date equipment for its instructional program?	Yes 1	75%	85%
	No 2	25	13
	No Response	--	2
Develop a work-study program	Yes 1	66%	72%
	No 2	28	25
	No Response	5	3
Place its students in jobs?	Yes 1	51%	51%
	No 2	46	46
	No Response	4	3
Follow up on its students after they left school?	Yes 1	32%	43%
	No 2	61	56%
	No Response	7	2
Determine what skills its program graduates possessed?	Yes 1	35%	43%
	No 2	58	49
	No Response	7	8
Have a sound working relationship with persons like yourself in its service area?	Yes 1	65%	61%
	No 2	26	36
	No Response	9	3

E. As you think back to your visit, would you say that you were positively impressed by what you learned about the programs of the agency? (Circle one number)

Yes 1	49%	77%
2	39	20
No Response	12	3

F. Do you feel that your training to be a team member was adequate? (Circle one number)

Yes 1	89%	79%
No 2	9	21
No Response	2	--

G. Do you believe that visitation teams of five or more individuals should include at least two persons who are neither educators or students? (Circle one number)

Yes 1	86%	89%
No 2	14	10
No Response	--	2

H. If asked again, would you agree to be a team member?
(Circle one number)

		<u>Ed.</u>	<u>Non-Ed.</u>
Yes	1	86%	79%
No	2	2	13
No Response		12	8

I. Are you positively impressed by the operation of the
Three Phase Evaluation System? (Circle one number)---

Yes	1	84%	89%
No	2	7	7
No Response		9	5

J. What is the exact title of your present occupation?

I appreciate the time and attention you have given to these questions. If you have any suggestions you would like to make for the improvement of the Three Phase Evaluation System, they may be recorded in the space just below my signature. Please return the questionnaire in the self-addressed, stamped envelope which has been enclosed. Thank you again for your cooperation.

Sincerely yours,

Daniel P. Norton

Daniel P. Norton
Director of Research, Midwestern Office
Educational Testing Service
Evanston, Illinois 60201



Appendix I
ETS Questionnaire for
Program Planners

STATE OF ILLINOIS
ADVISORY COUNCIL ON VOCATIONAL EDUCATION

222 SOUTH COLLEGE
SPRINGFIELD, ILLINOIS 62706
PHONE 217-525-2892

RICHARD B. OGILVIE
GOVERNOR

September 11, 1972

WILLIAM E. NAGEL
EXECUTIVE DIRECTOR

Dear Occupational Program Planner:

Your agency has submitted a plan for occupational education to the Illinois Division of Vocational and Technical Education for Fiscal 1972-73, of which you have been listed as the preparer. I am writing to you in your role as a planner and an individual who is highly informed about planning and evaluation as they are undertaken by local education agencies.

The Illinois Advisory Council on Vocational Education, for which I am Executive Director, is appointed by the Governor in accordance with Public Law 90-576. Its thirty-four members are drawn from business, industrial and other fields and is representative of the different geographic regions of the State. We are charged with responsibility to submit an annual evaluation report describing the effectiveness of federally assisted vocational programs to the U. S. Commissioner of Education and the National Advisory Council.

This year we have contracted with Educational Testing Service to help us learn how effective the Three Phase Evaluation System has been. This letter introduces Educational Testing Service. We request that you assist them in their work by responding, in accordance with your best judgment, to the questionnaire that will accompany this letter. Please be assured that your responses will be of real use to us, and that your individual responses will be kept confidential.

Thank you for your kind assistance.

Sincerely,

William E. Nagel
Executive Director

WEN . pd

Dear Mr.

As the administrator who was primarily responsible for the preparation of the F.Y. 1971-72 planning proposal submitted by your agency to the Illinois Division of Vocational and Technical Education (DVTE), you can be of particular help in the Council sponsored assessment of the effectiveness of the DVTE Three Phase System for Planning and Evaluation. Your answers to the questionnaire below will be used by the Council for guidance and recommendations on future plans.

All individual questionnaires will be treated as confidential material, and only summary analyses of pooled data will be delivered to the Council. Please be entirely frank in your answers, and return the completed questionnaire in the enclosed envelope as soon as possible.

Sincerely yours,



Daniel P. Norton
Director of Research, Midwestern Office
Educational Testing Service
Evanston, Illinois 60201

THREE PHASE SYSTEM QUESTIONNAIRE

for Program Planners

Please circle one of the letters following each statement that best describes your response.

SA - Strongly Agree
A - Agree
D - Disagree
SD - Strongly Disagree
NA - Not Applicable or No Opinion

No
Response
(0) (1) (2) (3) (4) (5)

1. The forms which the DVTE provides to local agencies are well designed and the instructions are clear and easily understood.		SA	A	D	SD	NA	
	%	5	5	49	28	12	-
2. I know the proposals I prepare will be reviewed fairly and on schedule.		SA	A	D	SD	NA	
	%	3	16	65	11	4	2

*137 questionnaires were mailed. Percents are based on the responses of the 114 individuals whose questionnaires were returned by November 1, 1972.

	No Response (0)	(1)	(2)	(3)	(4)	(5)
3. I understand the criteria by which our plans are reviewed and judged.	% 2	SA 8	A 55	D 32	SD 2	NA 1
4. We have gained a lot in our planning efforts from having employer representatives advising us.	% 3	SA 14	A 48	D 18	SD 8	NA 9
5. The DVTE is doing a good job of helping our agency to understand how to meet financial accountability requirements.	% 2	SA 4	A 31	D 50	SD 8	NA 5
6. Our planning activities would have been more successful with external help from the DVTE or some other agency to:						
a. Conduct student follow-up studies.	% 4	SA 12	A 45	D 26	SD 9	NA 4
b. Conduct need survey in our community.	% 5	SA 15	A 40	D 29	SD 7	NA 4
c. Conduct employer need surveys.	% 5	SA 11	A 45	D 29	SD 6	NA 4
d. Conduct student interest surveys.	% 5	SA 11	A 31	D 41	SD 10	NA 3
e. Prepare behavioral objectives.	% 5	SA 24	A 37	D 25	SD 7	NA 3
f. Conduct effective evaluations.	% 6	SA 12	A 56	D 18	SD 5	NA 3
g. Identify job entry skills required of students.	% 5	SA 18	A 44	D 25	SD 5	NA 3
h. Prepare comprehensive planning documents.	% 5	SA 16	A 42	D 26	SD 5	NA 5
i. Set priorities for program development.	% 5	SA 14	A 39	D 29	SD 9	NA 4
j. Organize advisory committees.	% 4	SA 5	A 22	D 53	SD 13	NA 3
7. Schools that are to be visited this year ('72-'73) will benefit from the preparation they will make for these visits.	% 2	SA 32	A 48	D 12	SD 2	NA 4
8. Visitation team members should be drawn from more than 50 miles for the agency they will visit.	% 4	SA 18	A 29	D 34	SD 9	NA 7
9. Less effort was necessary to prepare a plan for 1972-73 than to prepare one for 1971-72.	% 3	SA 14	A 36	D 28	SD 14	NA 4
10. The Planning and Evaluation Unit of the DVTE tries to be helpful to agencies when they are preparing their plans.	% 2	SA 18	A 62	D 9	SD 1	NA 9
11. It is difficult to know exactly which students should be classified as handicapped.	% 3	SA 21	A 47	D 22	SD 5	NA 2

	No					
	Response (0)	(1)	(2)	(3)	(4)	(5)
12. The amount of money we receive for our programs does not justify the cost of our planning effort.	SA	A	D	SD	NA	
	% 7	20	25	33	12	3
13. Students have been a big help to us in our curriculum development.	SA	A	D	SD	NA	
	% 2	4	52	39	2	3
14. Our counselors are well qualified to do occupational counseling.	SA	A	D	SD	NA	
	% 3	11	46	30	9	2
15. We believe we should formally help our graduates and dropouts get placed in jobs.	SA	A	D	SD	NA	
	% 4	26	46	15	4	4
16. I would like to see our programs judged by the occupational skills our students acquire.	SA	A	D	SD	NA	
	% 3	13	61	16	2	5
17. My DVTE Regional Director has given me a great amount of help in my efforts to plan well.	SA	A	D	SD	NA	
	% 2	27	46	18	3	5
18. Employers do not know enough about the skills their employees need for us to develop programs closely related to their needs.	SA	A	D	SD	NA	
	% 4	5	23	48	12	7
19. It is not important to have fully modern equipment for occupational programs.	SA	A	D	SD	NA	
	% 4	6	25	33	31	1
20. Site visitation will prove to be a waste of time and money.	SA	A	D	SD	NA	
	% 3	3	13	46	32	4
21. It is easy to involve advisory committee members in planning.	SA	A	D	SD	NA	
	% 3	4	25	48	20	1
22. The guidelines we received helped us to develop needed new programs.	SA	A	D	SD	NA	
	% 3	2	45	32	11	7

Please respond to these items only if you were visited last year:

23. Our visitation team prepared a fair and competent report.	SA	A	D	SD	NA	
	% 1	13	25	6	4	-
24. We knew what we had to improve upon to have this year's program plans approved.	SA	A	D	SD	NA	
	% 1	9	31	7	1	1
25. The team members who came to our agency were well prepared to do their work.	SA	A	D	SD	NA	
	% 1	10	28	9	2	-
26. We received good followup support from the DVTE after we were visited.	SA	A	D	SD	NA	
	% 1	5	25	11	4	2
27. The visitation phase of the Three Phase System should be continued at least until each agency has had two visits.	SA	A	D	SD	NA	
	% 1	15	24	6	2	2

Please provide any additional comments or suggestions on the back of this page.