DOCUMENT RESUME

ED 271 550 CE 044 605

AUTHOR Geroy, Gary D.

TITLE Education for Work: An Integration of Vocational

Education and Employer Sponsored Training in

Minnesota. Project Number Thirteen.

INSTITUTION Minnesota Univ., St. Paul. Dept. of Vocational and

Technical Education.

PUB DATE Jun 86

NOTE 159p.; A project of the Training and Development

Research Center. An approved Ed.D. thesis topic,

University of Minnesota.

PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC07 Plus Postage.

DESCRIPTORS Cooperative Planning; Economic Development;

*Educational Needs; *Educational Philosophy; Educational Policy; *Education Work Relationship;

*Futures (of Society); Industrial Education;

Institutional Cooperation; Job Training; On the Job Training; Postsecondary Education; *School Business Relationship; Secondary Education; State Programs:

*Vocational Education

IDENTIFIERS Minnesota

ABSTRACT

The study described in this document was conducted to identify the development and implementation issues surrounding the concept of integrating employer-specific education-for-work capabilities into Minnesota vocational education. The methodology of the study was as follows: (1) establish a small stakeholder group that represents constituencies with a stake in the research outcome (vocational education administrators, higher education officials, and business and industry representatives); (2) in collaboration with this group, identify profile-specific individuals to be interviewed and conduct interviews; and (3) interpret and analyze data. Issues identified through the study include the following: fiscal resources and management; program service profile and capabilities; supporting organizations and administrative structures; professional development, qualifications, and selection; evaluation of program and professional activities; the vocational education program role in larger economic strategies; and equity and access considerations. These issues were considered by the individuals contacted; their comments and reactions are profiled in the numerous tables in this document. The study concluded that more research and evaluation of programs and philosophies will be necessary to help the United States move into the role of a post-industrial society. References, figures, and an extensive number of tables are included. The appendixes provide information on the role of stakeholders as well as interview questions and materials for the stakeholders. (KC)



TRAINING AND

DEVELOPMENT

RESEARCH

CENTER

PROJECT NUMBER THIRTEEN

EDUCATION FOR WORK: AN INTEGRATION OF VOCATIONAL EDUCATION AND EMPLOYER SPONSORED TRAINING IN MINNESOTA

Gary D. Geroy June 1986

university of minnesota

DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION . ST. PAUL, MINNESOTA

Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been too interest the control of the contr

This document has been replaced as received from the person of organization or organization.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

S0974037

Table of Contents

		PAGE
Acknowle	edgements	iii
List of	Tables	įν
List of	Figures	νi
List of	Appendices	vii
Chapter	1 Introduction	1
	The Research Problem	9
Chapter	2 Evaluation Research	10
	Historic Perspectives	13
	Philosophical Foundations	14
	Key Participants	17
	Goal vs Non-Goal Evaluation Research	18
	Summary	20
Chapter	3 The Evaluation Research Strategy	21
	Stratified Sampling Considerations	22
	Data Gathering Options	23
	Data Gathering Design	25
	The Role of the Stakeholders	26
	Research Strategy to be Employed	26
Chapter	4 Data Gathering Procedures	28
	Identifications and Preparation	
	of Stakeholders	28
	Developing the Structured Interview	
	Questions	33



	ii
Selection of Interviewees	35
Data Gathering Interview Activities	36
Chapter 5 Analysis of Data	37
Organization of Data	38
Interpretation of Data	39
Chapter 6 Summary	111
Planning	114
The Corporation as a Social	
Institution	116
The Public and the Private	
Interaction	117
The Faradigm	118
A Question of Power	120
The Charge to Vocational Education	121
Reference List	124
Appendices	127



Acknowledgements

I wish to acknowledge and thank the following individuals for their supportive roles as stakeholders in this study.

Dr. Deene Allen, Director: Adult Extension State Board of Vocational Technical Education State of Minnesota

Mr. Bruce Cote, Director of Corporate Training Hutchinson Technology Incorporated

Ms. Bonnie Herr, Organization Development Manager 3M Corporation

Ms. Marsha Keller, Deputy Commissioner Department of Energy and Economic Development State of Minnesota

Dr. Gordon Swanson, Director of Graduate Studies Department of Vocational and Technical Education University of Minnesota

I wish to thank the following individuals for their participation and contributions to this study.

Chris Kuderka
Marnie Mahlberg
Jackie Lind
Steve Militich
John Mercer
Sue Boehlke
Bill Weiser
Jim Rossbach

Loren Freeburg
Don Seeberger
Brian Zucker
George Cope
R.E. Backlund
Jan Smith
Stan Edin
Jerry Moss



List of Tables

Table		Page
1.	Key Response Phrases re: Fiscal Resources	
	and Management	. 41
2.	Key Response Phrases re: Program Service	
	Profile and Capabilities	. 52
з.	Key Response Phrases re: Supporting	
	Organizations and Administrative Structures	. 58
4.	Key Response Phrases re: Professional	
	Development, Qualifications, and Selection	. 63
5.	Key Response Phrases re: Evaluation of Program	
	and Professional Activities	. 72
6.	Key Response Phrases re: The VoEd Program Role	
	in Larger Economic Strategies	. 77
7.	Key Response Phrases re: Equity and Access	
	Considerations	. 83
8.	Domains of Interest Views on Fiscal Resources	
	and Management	. 89
9.	Domains of Interest Views on Program Service	
	Profile and Capabilities	. 91
10.	Domains of Interest Views on Supporting	
	Organizations and Administrative Structures	. 92
11.	Domains of Interest Views on Professional	
	Development, Qualifications, and Selection	. 93



12.	Domains of Interest Views on Evaluation Of
	Professional and Program Activities 95
13.	Domains of Interest Views on the VoEd's Program
	Role in Larger Economic Strategies 96
14.	Domains of Interest Views on Equity and Access
	Considerations 97
15.	Issues Related to Fiscal Resources and
	Management
16.	Issues Related to Program Services Profile
	and Capabilities100
17.	Issues Related to Supporting Organizations
	and Administrative Structures102
18.	Issues Related to Professional Development,
	Qualifications and Selection104
19.	Issues Related to Evaluation of Professional
	and Program Activities106
20.	Issues Related to the VoEd's Program Role in
	Larger Economic Strategies108
21.	Issues Related to Equity and Access
	Considerations110



List Of Figures

igure Pag	ge
 Vocational Education and Training Profession: 	
comparison of expertise on R&D issues	6
2. Research design	27
 Domains of interest for development of 	
stakeholder groups	32
4. Domains of interest and Vocational Education's	
internal/external relationship	35
5. Interrelationship between education and	
society12	20
6. The relationship between education and	
organization's dimensions1	20
7. Emerging post industrial society power	
structures1	21



60 8

List of Appendices

Appendi:	×	Page
Α.	Abstract of Study	.127
₿.	Role of Stakeholders	.130
С.	Interview Preparation Package For Interviewees.	.132
	- Letter of Introduction	
	- Overview of Study	
	- Terms and Definitions	
	- Scope of Questions and Response Guidelines	
D.	Structured Interview Questions	.139
Ε.	Information Sheet For Stakeholders	.143
	- Overview of Study	
	- Scope of Questions and Response Guidelines	
	- Terms and Definitions	
	- Data on Researcher	



Chapter 1

<u>Introduction</u>

The focus of this evaluation research was to examine issues surrounding the concept of integrating employer—specific education—for—work capabilities into Minnesota Vocational Education.

The United States 1914 vocational education legislation created an agenda of explicit education for work, which altered the traditional model of public education and on-the-job training as preparation for life's vocations (Swanson, 1983). Vocational education is defined in the 1984 Minnesota State Plan as

those vocational service areas within which career opportunities are provided for persons with less than a baccalaureate degree. The general categorizations utilized include the following specific service areas. agriculture, business and office, distributive, health, home economics, technical and trade and industrial.

Vocational education in the United States provides individuals with the necessary knowledge and skills to secure and perform jobs in the labor market. However, most of the knowledge and skills currently held and employed by the American workforce have been developed through employer-



sponsored training, not by vocational education (Swanson & Murphy, 1982).

The concurrent demands for increased and changing skills and knowledge for the workplace have led to a shift from unstructured on-the-job training to structured employer-sponsored training (Swanson, 1983). Training is defined as: "the presentation of controlled information and practice resulting in performance of criterion behavior by the learner in a manner which allows evaluation. The definition implies both effectiveness and efficiency" (Johns-Manville, 1976). This shift is not a recent phenomenon. a 1977 survey by the New York Conference Board of 610 firms having 500 or more employees, it was found that these firms spent over \$2 million on structured employee training in just one year (Lusterman, 1977). While this and other more recent studies indicate that training in business and industry will continue to expand, if vocational education wishes to become a partner, it will need to analyze the issues facing private sector training and respond in ways which are valued by employers in both the public and private sectors.

How do the public sector and the private sector training professions feel about this partnership? At the February 1984 hearings on the reauthorization of the Voca-tional Education Act, Fred Wells, Assistant Vice President of Mountain Bell Telephone, spoke about his organization's work in cooperative training programs with both secondary and



Ù

postsecondary educational institutions. He testified specifically about the success of cooperative ventures with Albuquerque Technical Vocational Institute to provide training for women for cable splicing and installation and pole climbing. He also reported on the success of the joint effort with Idaho State University's Metropolitan State College for the electronic switching systems operator's orientation training to Mountain Bell telecommunictions technology systems, and Colorado Distributive Education Facility's customer clerk training. In concluding his presentation, Wells suggested that cooperative efforts between industry and vocational education institutions could meet Bell's and other organization's needs for competent, motivated employees. He concluded his remarks by sharing his belief that the future ability of the United States to compete successfully in the world marketplace would be a function of our nation's human resources.

At the same hearing, G. Richard Hartshorn, Manager of the Management and Technical Training Department, Ford Motor Company, concurred with Wells. Re testified that linking vocational educators and employers could result in vocational education that develops individuals whose preparation is geared toward required job skills, especially as the need to respond to shifts to high technology accelerates. Additionally, the American Society for Training and



Development (ASTD) presented a position paper at this hearing. This paper submitted that federal legislation which would support new collaboration between vocational educators and employers could have several important benefits including (a) cost-effective training in job-specific skills and knowledge, (b) more realistic job and career expectations of students when they enter the world of work, (c) improved communication links between employers and educators for assessing continuing education needs, and (d) more efficient investment of both public and private resources in the human capital of our economy.

ASTD concluded their presentation with the position that

the strong trend for growth of the employer role in human resource development will continue because of its immediacy and relevance. However, there will be a new set of challenges to build a stronger, more relevant role for the traditional public vocational education systems to provide generic skills and specific skills where feasible, especially for smaller employers.

The reauthorization testimony focused primarily on cooperative training efforts through the postsecondary technical institutions. To a lesser degree, four-year degree institutions were cited as potential training partners with industry. How do current vocational education



professional roles and interests parallel training professional specializations and needs? The training-related needs of industry and the consulting interests of faculty have been assessed by Schoonmaker in 1984. This study showed that university level industrial educators considered themselves best suited to provide consulting services in the development, design, and delivery of technical skills and related knowledge training. The study also revealed that these educators do little training related consulting despite their interest and ability to provide such services.

Swanson and Murphy have taken another comparative view of education and training professionals by examining expertise on research and development issues. Their findings are presented in Figure 1.

This evidence suggests that it is reasonable to consider integrating private sector training and public sector vocational education into a larger societal structure of "education for work." The thesis is that the goal of meeting the labor needs of industry and business is the same for vocational education and training. Although this is not a new concept in this country, this model has been more fully implemented in some of the East European countries as part of their national efforts in support of their central economic systems. Additionally, this model is most visible in our nation in the current agriculture extension model. The challenge is to identify how to achieve this common



î 14

purpose. The one common challenge cited most often in these efforts is the provision of specific job skills to individuals who lack a basic positive work attitude and the basic education skills (Swanson & Murphy, 1982).

Dimensions of	Selected R&D	Avails	bie Expe	rtize		
Training	issues	Trng	Equal	Voc		
Overall Training Issues	1 Cost-Benefit of Trng 2 Goal Analysis of Total Organization	x	x			
Types of Training						
* Skills & Technical Training	3 Analysis of Process & Trouble Shooting Behavior	x				
* Management & Subject Matter Training	4 Analysis & Synthesis of Subject Matter		x			
* Motivational Training	5 Ethics of Attitudinal Training		x			
Job Roles						
* Instructor	6 Development and Evaluation Instructional Skills			x		
* Media Producer	7 New High Technology Media-Communications	x				
* Designer	8 Understanding the Training Process		x			
* Manager	9 Training Needs Asssessment 10 Computer Managed Training	x	x			

<u>Figure 1</u>. Vocational Education and Training Profession: comparison of expertise on R&D issues



Literally thousands of private-sector training programs are locally developed and delivered each year. Additionally, in some states, public-sector sponsored customized vocational education is offered as an economic incentive to draw capital investment by national and multinational organizations. In 1983, at least 20 states had set up customized training programs for business with a price tag of \$27 million and a trainee population of 110,000 (Manpower and Vocational Education Weekly, 1983).

In a recent effort, the Governor of Minnesota offered, amongst other financial incentives, free customized vocational training for plant employees if a major auto manufacturer would locate in the state. The price tag on this training was an estimated \$31 million (Moss, 1985).

As training needs and demand grows, so does a supporting base of private training businesses. Up to now, vocational education has captured little of this activity because its response time is perceived as too slow. In order to expand its role in an acceptable responsive way, vocational education needs specific changes in its organization, staffing, and facility utilization (Swanson & Murphy, 1982; Gentilman, 1983).

In order to organize vocational education to be responsive to one or all of the phases in the development and delivery of customized training, it appears that several steps need to be taken. These include the suitably prepar-



ation of professional personnel for these new roles and the development and implementation of policies and practices to guide vocational education customized training activities (Moss, 1985).

To move from traditional vocational education to one which integrates customized employer-specific training will require strategic management of organization, cultural, and political issues. It is clear from the management literature that organization and mission change can be strategically and effectively managed (Tichy, 1982; Burke, 1982).

The key to managing strategic change and making an organization effective is to align an organization's mission, strategy, structure, and human resources with its political and cultural systems. To manage in times of change and mission realignment, organizations must examine basic questions about their current nature and purpose and where they want to be. This will result in new missions and strategies and accompanying financial and human resource systems. This also will have an impact on the organization's political and cultural systems. Issues of how individuals or groups are rewarded, make decisions, formulate values and beliefs, and make policies will have to be addressed. The first step in developing a guiding policy for change then becomes one of identifying the critical issues which an organization must address (Shein, 1985).



The Research Problem

The research problem is to identify issues to be considered during the policy development and program planning phases of the State Department of Vocational Education's training services program which would implement the concept of integrating employer-specific education-for-work capabilities into Minnesota Vocational Education.

This study focused on answering the following specific question regarding the proposed Vocational Education's training services program:

What are the policy issues which need to be addressed regarding: fiscal resources; organization and professional development; program implementation and evaluation; and program access?



Chapter 2

Evaluation Research

The evaluation research method will be used to carry out this study. The activities for this evaluation research will conform to the general guidelines recomended by practicing professional evaluators Michael Patton (1982) and James Veney and Arnold Kaluzny (1984). Prior to reviewing the evaluation research method, the term evaluation research needs to be defined. The following definition of evaluation research will be used to guide this study:

The practice of evaluation involves the systematic collection of information about the activities, characteristics, and outcomes of programs, personnel and products for use by specific people to reduce uncertainty, improve effectiveness, and make decisions with regard to what those programs, personnel or products are doing and affecting. This definition of evaluation emphazises (1) the systematic collection of information about (2) a broad range of topics (3) for use by specific people (4) for a variety of purposes (Patton, 1982, pg. 35).

This definition emphasizes the information needs and interests of people that hold a stake in the research question being studied. The researcher limits information



relevant and useful to making decisions, judgements, comparisons, or goal attainment assessments.

The general guidelines for conducting evaluation research include three levels of decision making to respond to the research question. These levels include purpose, techniques, and plan.

There are six major purposes that can be served by evaluation research. They include needs assessment, basic research, small scale testing, field evaluation, policy analysis, fiscal accountability, coverage accountability, impact assessment, and economic analysis (Raizen & Rossi, 1981). Based on the evaluation research question, the researcher logically selects the appropriate evaluation research purpose. Beyond the evaluation research question and purpose, there are six techniques of evaluation. They are identified by Patton as follows (1982):

- Front-End Analysis: focuses on preinstallation, context, or feasibility analysis prior program planning and implementation.
- Evaluability Assessment: focuses on the feasibility of various evaluation approaches and methods.
- Formative Evaluation: focuses on the program development process.
- Impact Evaluation: focuses on the summative, outcome, effectiveness of program efforts.



- 5. Program Monitoring: focuses on periodical checks of compliance with policies and/or legislated guidelines.
- 6. Evaluation of Evaluation: focuses on metaevaluations and evaluation audits and critiques of internal evaluations.

The program being addressed by the research is somewhere on a continuum from conceptualization to completion. The six techniques parallel the continuum and, therefore, there is a best technique for each point along the continuum.

Patton (1981), provided a list of 31 specific evaluation tools which may be used in each of the six techniques, including cost/benefit analysis, efficiency evaluation, norm-referenced evaluation, and process evaluation. From this list, two tools that will be utilized for this study are as follows.

- 1. Goal-free evaluation: What are (or will be) the actual effects of the program (without regard to what the staff says they want to accomplish)?
- 2. Utilization-focused evaluation: What information is needed and wanted by decision makers, stake holders, and information users to make decisions about program implementation/improvement?



Historic Perspectives

The practice of evaluation research, much like basic research in the traditional social and behavioral science disciplines, involves the sytematic collection of information. Before 1975, technical quality and accuracy were the primary concerns of evaluation researchers. Methods decisions dominated the evaluation decision process and were often the only criterion by which evaluations were judged. Methodoligical rigor meant experimental design, quantitative data, and detailed statistical analysis.

Evaluators, however, found that methodological rigor did not ensure the use of the data. Utilizability became the concern of decision makers. Questions of methodological appropriateness, situational sensitivity, evaluator responsibility, and abuse of evaluation research were the focus of a 17-member committee representing 12 professional organizations. In 1981, evaluation standards, which evolved over a five-year period of work by this committee, were published by the Joint Committee on Standards for Educational Evaluation. They called for evaluations to present four primary features — utility, feasibility, propriety, and accuracy. These features required that evaluators be truly situationally responsive and use research techniques which support this expectation (Anderson & Ball, 1978; Patton, 1982; Guttentag & Struening, 1975).



22

These standards present a mandate to be practical in carrying out evaluation research. The practicality issue addresses two aspects of the evaluation effort. The first is the evaluation process and the concerns of cost, time-liness, handling of feedback, and manner of implementation. The second aspect of the practicality issues deals with evaluation content and outcome. The features of utility, propriety, and accuracy need to be reflected in the data collected, the interpretation of the data, and the resulting recomendations (Patton, 1982; Guttentag & Struening; 1975).

Philosophical Foundations

Research can be divided into three types and the resulting knowledge can be classified into six kinds. The first type is disciplinary research. Disciplinary research is designed to improve a discipline and consists largely of research activities to develop and improve associated theories and/or quantitative techniques. Disciplinary research can be of either known or unknown relevance for practical problems faced by decision makers (Johnson, in press).

The second type of research is called subject matter research. This type of research is defined as multi-disciplinary research on a subject of interest to a set of decision makers dealing with a set of practical problems about which they must make decisions. The third and final



type of research is problem solving research. This research is defined as research specific to a given problem and a given decision maker or a group of decision makers who are concerned with the same problem. Problem solving research, like subject matter research, is multidisciplinary (Johnson, in press).

The knowledge outcome of research can be classified into one of six kinds (Johnson, in press):

- Analytic Knowledge is formal and is expressable in terms of pure logic or pure mathematics.
- Primitive Undefined Terms is based on experiences involving our five senses.
- Synthetic Knowledge is knowledge about the characteristics of the real world; is described through the use of primitive undefined terms.
- 4. Positive Knowledge is sythetic knowledge which deals with the characteristics of conditions, situations, or things in the real world other than the goodness/badness or rightness/wrongness issues.
- 5. Normative Knowledge is knowledge having to do with the goodness and badness of conditions, situations, and things in the real world.
- 6. Prescriptive Knowledge (decision rules and power) is knowledge about what ought or ought not to have been done or ought or ought not to be done.



The types of research and kinds of resulting knowledge discussed above are the products and activities of three major philosphical foundations of research. The first philosophical foundation is positivism. The early positivists were pure empiricists who did not wish to distort the meaning of their observations by grounding interpretations in logic or theoretical systems of analysis. Logical positivists would emerge later who incorporated into their empirical work a logic element. Johnson (in press) submits that positivistic research can contribute much to both disciplinary and subject matter research.

The second philosophical foundation of research is normativism. Normativists are concerned with producing knowledge about goodness and badness as inputs into processes for determining answers to questions of rightness and wrongness. Normativism has its best implications when focused on problem-solving research and to a much lesser degree subject matter and disciplinary research (Johnson, in press).

The third philosophical foundation of research is pragmatism. Pragmatists find the meaning of any concept or proposition in its practical consequences. If the pragmatist fully understands the consequences of a concept for solving problems, he/she believes that they know or understand the whole truth of that concept. Additionally, pragmatists view the likelihood of data or information retaining truth from



one problem to another as very small. Of the three philosophies, pragmatism is the one most specialized for problem solving research (Johnson, in press).

Within the context of these philosophical foundations, research methods, and outcome knowledge classifications, evaluation research is <u>pragmatic</u> in nature. Additionally, its orientation is one of problem solving and subject matter and it is capable of producing any or all of the <u>types</u> of knowledge described.

Key Participants

There are two primary participants involved with the successful implementation of evaluation research. They are the research evaluator and the stakeholder group. Three research evaluator styles have been identified. The first style is the surveillance and compliance approach. In this "Lone Ranger" approach, the evaluator is on a mission of enforcement and all the programs and personnel are potential or suspected outlaws. The second style is portrayed by the aloof, value-free scientist whose mission is the acquisition of unchallengeble data. The third evaluator style is the collaborative style. This focuses on a series of evaluator-managed collaborative, consensus building and cooperative activities between the stakeholders. The outcome is the clarification of their information needs and use of the information to improve their effectiveness. In this



approach, the evaluation researcher and information users become collaborating partners in the search for useful information (Patton, 1982; Struening & Guttentag, 1975).

The three research evaluator styles have particular emphasis and information applications. The surveillance and compliance styles emphasize justice. The scientific style emphasizes truth and the collaborative style emphasizes utility.

The second participant -- the stakeholder group -- is established on the philosophy that key people who have a stake (or potential stake) in an evaluation research outcome should be actively and meaningfully involved in shaping that research effort. The intent of this involvement is to focus the evaluation on meaningful and appropriate issues, thereby increasing the likelihood of utilization. The stakeholder group is composed of indiviuals or representatives of groups which will be potentially impacted by, or users of information resulting from the evaluation research activity (Anderson & Ball, 1978).

Goal Versus Non-Goal Evaluation Research

The traditional means to conceptualize evaluation research has been to focus on the stated goals and objectives of a program. However, there are other options available to evaluation researchers. Patton (1982), has identified and described them as follows:



- 1. Focus on evaluation questions: What are the questions that the stakeholders would like to have answered by the research?
- 2. Focus on concerns and issues (as in responsive evaluation): A concern would be something that is important to one or more parties. An issue is a statement or proposition that allows for different points of view.
- 3: Focus on program theories and rationales: The evaluation looks at the relationships among what staff members believe or say they are doing and actually practice.
- Focus on decisions to be made or problems to be resolved.
- 5. Focus on program or organizations (client) needs:
 The evaluation assesses the extent to which
 clients perceive the relevance or meaningfuln
 of the organization's efforts and programs.

These options expand the traditional limitations of goal-based evaluation designs by providing alternate ways to perceive and proceed with evualation research. While goals and objectives specify desired program outcomes and thereby influence the research design to include clear specification and measurements of goal attainment, information users may need data only on program imlementation or some other aspect of the program operations. Meeting this alternate nongoal-



28

based evaluation research need was what provoked Patton (1982) to introduce alternatives into the practices of evaluation researchers.

Goal-free evaluations are strategies for situational responsiveness. They avoid assuming that every program planning process automatically requires the delineation of clear, specific, and measureable goals. Goal-free evaluations are particularly significant in gathering data that have an impact on policy development and implementation planning.

Summary

Evaluation research is grounded in established philosphical foundations. It has a pragmatic mandate coupled with a problem-solving orientation and is carried out through collaborative strategy. It approaches the need to gather data that lead to decisions in a systematic manner. The problem to be addressed provides the basis for the development of evaluation research questions. Once the research question(s) are established and the evaluation research purpose is identified, the researcher selects a technique that best fits the program activity phase being addressed. With the research activity framed by this systematic approach, the researcher then selects and applies the best-suited research evaluation tools.



Chapter 3

The Evaluation Research Strategy

There are two major alternative paradigms of evaluation research design which can guide evaluation research. The first evaluation research design paradigm is the hypothetico-deductive methodology which focuses on quantitative measurement, experimental design, and statistical analysis. The second paradigm is the holistic-inductive design which focuses on in-depth, open-ended interviewing; personal observation; qualitative data; holistic analysis; and detailed description derived from close contact with the subject of the study. The hypothetico deductive science paradigm aims at prediction of social phenomena, whereas the holistic-inductive paradigm aims at understanding of social phenomena (Patton, 1982; Travers, 1958).

The purpose of this study is to identify issues. The identification of the issues will help to develop policy regarding the development and implementation of a program. To effectively develop these policies, it is necessary to find evidence which will identify the needs of several aspects of this program. This suggests that of the six purposes identified in Chapter 1, that the purpose of the research will be to perform a needs assessment. The technique that has been chosen for the research is the front-end analysis. This technique aligns itself with a



point along the program continuum beyond conceptualization but prior to policy and design development.

In the preceding chapters, it has been established that the tools that will be used in the evaluation research effort to answer the research questions will be goal-free and utilization-focused ones. The characteristics and needs of the program and the responding research design components and activities suggest then, that this study will be embraced in the holistic-inductive design.

Stratified Sampling Considerations

When the research questions posed in Chapter 1 is answered, the data which are identified will provide the basis for potential policy development which could guide changes in Vocational Education. The changes which would occur could involve organization structure and mission realignment. Changes like these can be efficiently and effectively managed if the critical issues associated with affected parts of an organization or program are identified prior to implementation of change (Shein, 1985; Tichy, 1982). Organization development literature has equated organizations to communities in that they both display vertical and horizontal structural patterns. Vertical patterns are structural and functional relations of various units and subsystems to the extraorganizational systems. The dimensions of the relationship may be specific and



defined or diffuse in nature, geographic or authority-based. The flow of authority may be downward (authoritarian) or 'upward (concensus). Horizontal patterns are the structural and functional relationships of the organization's various units and subsytems to each other. The dimensions of the relationships of horizontal patterns may be random, mission-specific or highly organized in structured functional relationships (Burke, 1982; Poplin, 1979; Shein, 1985; Tichy, 1982).

The research design in this study will include a stratified sample profile to address and access these vertical and horizontal structural patterns in both public sector vocational education and private sector industry and business. This will ensure sufficient data are gathered from affected parts of organizations to determine the cultural and political dimensions and related issues which potential decision makers may use in their considerations.

Data Gathering Options

There are several data gathering methods used by evaluation researchers. These are classified as monitoring, case study, survey, trend analysis, and experimental (Veney & Kaluzny, 1984). Monitoring is the comparison between the program plan and reality. It is particularly important and useful in formative evaluation and it is critical to the



evaluation of progress and sequence of activities which make up a program.

Case studies involve the selection of a single unique activity, organization, or entity for observation and development of conclusions. Case studies allow researchers to acquire large amounts of information about a single program and could involve nonparticipant observation or unstructured interviews. The information may be used to develop a representation of a type of program activity for further study or model development; also, it may be used for in-depth analysis of a one of a kind program.

Surveys focus on gathering information through questionnaires or interviews that are directed to populations of interest, recipients or potential recipients of a program output, program providers, program planners or managers. The purpose of these surveys is to obtain information about the perceptions and feelings of these groups about the issue being researched. Survey based research may be descriptive or analytical. The descriptive survey is concerned with producing an accurate picture of the real world or what will be percieved as the real world within the context of the research problem. The descriptive survey is ideal for use prior to the establishment of any program to examine the nature of a particular problem. Alternatively, analytic surveys are concerned with describing relationships between real-world phenomena. The



primary instruments used in survey activity are the self administered questionnaire and the structured interview administered by the researcher.

Trend analysis, sometimes called time-series analysis, is a general evaluation research strategy that combines aspects of monitoring with efforts to determine whether a particular program actually can be viewed as the cause of the change in the condition that he program was established to effect.

The last data gathering method is the experimental method. This is the ultimate in evaluation research since it can control variables and can provide the unequivocal answer to the ultimate *valuation question of whether or not a program made a difference. However, it is an extremely difficult technique to employ for long-term program efforts or for efforts which are currently operating.

Data Gathering Design

There is a need to access a variety of public and private sector organizations and subunits related to the research questions for this study. Because of this, a stratified data sampling strategy is most appropriate. This would effectively meet the demand that in order to manage change through policy development it is necessary to identify what impacts may be made on an organization's political and cultural systems.



This evaluation research is a front-end analysis dealing with preinstallation analysis to provide information that could be used for policy development, planning and implementation guidance. Veney and Kaluzny (1984) have suggested that the descriptive survey technique is an excellent tool for determining the nature of a problem prior to the installation or development of a program. Due to the discovery nature of the data being sought, Veney and Kaluzny also have suggested that a structured interview would be the most appropriate survey instrument.

The Role of The Stakeholders

The stakeholder group will have four primary tasks in this evaluation research effort. Their first task is to familiarize themselves with the evaluation research problem and conceptualizations involved in this study. The second task is to provide input into the survey instrument design and implementation strategy. The third task is to review and critique the interpretation of the data. The final task is to provide guidance for the presentation format for the final data.

Research Strategy to be Employed

The strategy to carry out this evaluation research is presented in Figure 2, and includes the following steps.

 Develop research questions for the evaluation research study.



- 2. Develop overall research strategy.
- Develop survey instrument (structured interview questions).
- 4. Esablish a small stakeholder group which represents constituencies with a stake or interest in this research problem.
- 5. Familiarize stakeholders with research problem and conceptualizations.
- 6. Review structured interview questions with stakeholder group.
- 7. Pilot test the survey instrument.
- 8. Revise survey instrument.
- 9. In collaboration with stakeholders, identify profile and number of individuals to be interviewed.
- 10. Identify specific individuals to be interviewed and arrange interviews.
- 11. Gather Data.
- 12. Sythesize and analyze data.
- 13. Present outcomes of study to stakeholder group.
- 14. Prepare and present final report.

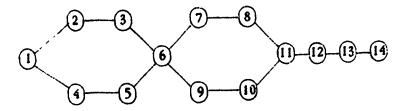


Figure 2. Research design.



Chapter 4

Data Gathering Procedures

The data gathering activities can be organized into four major groups. These included: identifying stake-holders, developing and testing the survey instrument, selecting individuals to be interviewed, and conducting the data gathering structured interviews.

Identification and Preparation of Stakeholders

The process of identifying stakeholders for this study began with an examination of the question of whether or not the implementation of this program would have internal and/or external implications to the vocational education organization. It was established in Chapter 1 that implementation of such a program would create professional development as well as organizational change and resource utilization impact issues within the current vocational education organization. Therefore, it was accepted that there were definite internal implications. The identification of specific issues was to be part of the outcome of this research effort. It was accepted that there was a domain of interest related to this program effort which was internal to the program and responsible for its delivery. This domain of interest was the AVTI and supporting postsecondary vocational education organization in Minnesota,



The answer to the second part of the question of whether or not there were implications external to the vocational education organization was arrived at by examining what major domains of interest within the state of Minnesota might undergo policy, mission, or procedure changes as a result of the availability of this program. In a very macro sense, it appeared that external to the postsecondary vocational eduction organization, there were three domains of interest which fit into this criteria.

The first external domain of interest was determined to be the potential purchasing users of the program. For purposes of this study, it was labeled the employer sector and was divided into two types. The first type was the larger major metropolitan-oriented employers and the second type was the smaller nonmajor metropolitan and nonmetropolitan employers.

The second external domain of interest was determined to be potential strategic users of the program. This would the state government with its attendant agencies which would be interested in utilizing this program to enhance their particular broad scope economic development and stabilization missions and strategies. The third external domain of interest was determinded to be potential supporters of this program. This included organizations which could be called upon to provide input and support into the change process associated with the development and implementation of this



training and development program into the vocational education organization. This included the professional development aspect of these activities.

In examining these external domains of interest, it was established by the researcher that these domains of interest would be considered valid organizers if at least one organization or interest group could be identified which met the activity classification criteria described for each domain of interest. The first domain was validated for the researcher when it was discovered that Onan Corporation from Fridley Minnesota and Hutchinson Electronics Incorporated from Hutchinson Minnesota had within the last year entered into contract arrangements to have the Area Vocational Technical Institutes (AVTIs) develop training programs for them. The second domain of interest was validated by a review of the elements of the 1985 Saturn Plant Economic Incentive Package proposed by the governor of the State of Minnesota to General Motors Incorporated. It contained elements prepared by the Department of Economic Development outlining vocational education provided training program support as part of the economic strategy package for the state.

The third domain of interest was validated after reviewing the program content and delivery mechanism for degree, inservice and specialized certification training that existed within the University of Minnesota's Department



of Vocational and Technical Education. Degree options and content showed institutional capability to provide program support and professional development training through the special services and/or traditional degree structures of the kind needed to implement and maintain the AVTI-based training and development program capabilities being considered.

With the question of internal and external implications resolved and the identification and validation of external domains of interest resolved, the identification of stake-holders from each domain of interest was the next task.

It was established in Chapter 2 that stakeholders may be individuals which represent groups which would potentially be impacted by, or users of information resulting from the evaluation research activity. In this particular study, these groups are the organizations and groups represented by each external domain of interest in addition to the Department of Postsecondary Vocational Education which represents the singular internal domain of interest. The stakeholders then, needed to be identified from within this framework of domains of interest and the target organization of postsecondary vocational education. This conceptualization is presented in Figure 3.

To be able to present perspectives of the individual domains of interest, the researcher determined to invite individuals to be stakeholders who had significant roles in



organizations that the researcher felt have demonstrated influence in their communities or fields of activity. The following organizations were identified as candidate organizations from which to solicit stakeholders: 3M Corporation and Hutchinson Technology Incorporated (to represent the first domain of interest's two types of employers), The Department of Energy and Economic Development (to represent the second domain of interest), The University of Minnesota's Department of Vocational Education (to represent the third domain of interest) and, the State Department of Postsecondary Vocational Education (to represent the fourth domain of interest).

Domains of Interest		
Delivery	Users	Support
Minnesota A.V.T.I.s	Strategic & Purchasers - Inrge metro - small metro & non-metro	Universities & Professional Schools

Figure 3. Domains of interest for development of stakeholder group.

Direct contact was made by either the resarcher or Dr. Richard Swanson with the following individuals who then agreed to serve as stakeholder for this study. The first individual to agree to serve as a stakeholder in this



research was Ms. Marsha Keller, Deputy Commissioner for the Department of Energy and Economic Development. The second stakeholder became Dr. Gordon Swanson, Director of Graduate Studies in the Department of Vocational and Technical Education at the University of Minnesota. The next stakeholder was Dr. Deene Allen, Director of Adult Extension Programs in the State Department of Vocational Education. The last two stakeholders to join the study were from the employer sector. They were Ms. Bonnie Herr, Organization Development Manager; E.N.I.T. Sector at the 3M Corporation and Mr. Bruce Cote, Director of Corporate Training at Hutchinson Technology Incorporated.

Meetings were scheduled with each stakeholder. These meetings focused on familiarizing the stakeholder with the scope and purpose of the study, outlining their roles in the study and discussing the draft questions and material that would be used during the structured interviews. Each stakeholder was provided with a folder which contained the following items: Abstract of the Study (Appendix A), Role of the Stakeholders (Appendix B), and Information Sheet for Stakeholders (Appendix E).

Developing the Structured Interview Questions

After reviewing the types of domains of interest involved in the stakeholder group, it was determined that there were potentially several different concerns that any



policy which would guide development and implementation of this program would have to address. Each domain of interest group had been classified according to the particular relationship that domain of interest would have to the program as either a user, provider or supporter. Additionally, that relationship was classified as focused either predominately on the internal organizational development and/or external delivery aspects of the program. It was felt by the researcher and the stakeholders that the profile of questions that were developed for the data gathering would need to embrace these various relationships. These relationships between the stakeholder's domains of interest and their concern about internal or external organizational activities are illustrated in figure 4.

As illustrated, no single stakeholder's domain of interest related exclusively to the internal or external activity aspect of the vocational education organization. The employer sector and the government relationships were predominately external in orientation while the University relationship tended to focus on the internal vocational education activities. The vocational education organization activities were focused fairly equally on internal and external aspects of the program.

To identify the issues that needed to be addressed in policy development in order to mee; this diverse interest need, seven categories of questions were developed. These



included questions dealing with fiscal resources and management, program service profile and capabilities, supporting organization and administrative structures, professional development and selection, evaluation of program and professional activities, the program role in larger state strategies, and equity and access considerations. These categories and the specific questions are pressented in Appendix D.

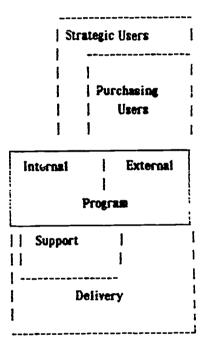


Figure 4. Domains of interest and Vocational Education's internal/external activity relationship.

Selection of Interviewees (information sources)

One of the primary responsibilities accepted by the stakeholders was to identify and arrange for individuals from their domain of interest to be interviewed by the



researcher. Each stakeholder was asked to identify three individuals and to gain their consent for a structured interview. The critera established by the researcher for selecting the interviewees was that stakeholders feel confident that the interviewees had sufficient knowledge and experience to be able to offer opinions which would accurately reflect the general position of organizations and/or groups within the stakeholder's domain of interest.

The Data Gathering Interview Activities

After the interviewees for the data gathering activities had been identified and specific meeting schedules established, each person to be interviewed received a pre-interview package. This package included the following items: cover letter confirming the date and time of the interview, an overview of the study, the scope of questions and response guidelines and a summary of terms and definitions. This package is contained in Appendix C.

All interviewees were given an opportunity at the interview to respond to all questions. In addition, the researcher offered questions, as needed, to clarify points and to help the interviewees develop their positions and opinions.

All interviews were recorded with the permission of the person being interviewed for analysis later and are part of the permanent data base for this study.



Chapter 5

Analysis Of Data

The data that were gathered during the interviews required a synthesis method that would allow for simple interpretation. One of the basic purposes of data analysis is to provide information to decision makers. The collaborative focused evaluation research method used in this study emphasizes the involvement of stakeholders to enhance the utilization of study outcomes. However, if the decision makers find the data interpretation or analysis method to be complex and not easily understood, the probability is high that the conclusions of the study will. not be utilized in the decision process. (Patton, 1982).

The questions that were used during the structured interviews were somewhat open ended in order to solicit an interest group's perspective and diversity of response rather than collect data for the confirmation or denial of a hypothesis. As such, the data gathered did not lend itself readily to quantitative statistical analysis.

Qualitative analysis of data on the other hand, can lead to misrepresentation of data unless it is presented in a fair manner so as to avoid overly simple interpretation.

The purpose of this study was to identify issues which the postsecondary vocational education program should consider in the development of the policies which would



guide the implementation of an AVTI training program service for business and industry in Minnesota. The data that was gathered were a variety of opinions submitted in response to a series of open ended questions regarding the various internal and external aspects of this proposed program.

Organization of Data

The analysis design included a total of three phases. The activities in the first two phases of the analysis design provided the framework for organizing the raw data. The activities in the third phase focused on identification of the issues which was the goal of this study. The first phase was called the "Key phrase response" phase. This involved reviewing all of the taped interviews and recording, in a table format, the key phrases in the responses to the questions asked. Key phrases were those statements made by the interviewees that the researcher judged to be directly responsive to the elements of the question being discussed and representative of the opinions being expressed. These phrases were organized into a table format and are contained in Tables 1 through 7. No identifiers were used to indicate who the specific respondents were although each set of response phrases were coded to indicate which domain of interest they came from.

The second phase was called the "views identification" phase. This involved reviewing all the key phrases to



identify common views in the responses given to each question during the interviews. In addition, it was noted when a particular view was addressed by each interviewee from within a particular interest group. This tally is indicated by the number of asteriks (*) on the raw data tables containing this data. The data derived from this phase of the analysis was organized into tables and is contained in Tables 8 through 14.

Interpretation of Data

The third and final phase in the data analysis was concerned with the identification of the issues that were contained in the views identified in Tables 8 through 14. To present a balanced perspective and context for the data analysis outcome, each issue that was identified is accompanied by a brief discussion. There were three steps involved in the interpretation of the data. The first step required the researcher to identify the issues that the researcher felt were embraced in the views expressed by the interviewees and summarized from their key phrase responses. The second step was to develop tables as a vehicle to present these issues. These tables contain three pieces of information which include: the interview question, the identified issues, and a short discussion of each issue. Tables 15 through 21 summarize the issues from each discussion area explored during the study. The third step



involved the researcher reviewing both these issues and their attendent evidence with each stakeholder.



Table 1

Key Response Phrases re: Fiscal Resources and Management

General Question: What do you perceive should be the key issues to be considered regarding fiscal responsibilities for the program under consideration with regard to:

- 1. legislative funding mechanisms and levels,
- 2. cost assessment,
- use and disbursement of funds generated by the program.

Question Code Phrase Key for Responses

- a = postsecondary vocational education
- b = large metro-based purchasing users
- c = small metro- & nonmetro-based purchasing users
- d = professional preparation institutions
- e = strategic users

Responses: Legislative Funding Mechanisms and Levels

The state needs to develop a policy to allow schools to go into specific industries rather than offering more generic programs...we have a critical need for funding to allow us to provide needs assessment services....there needs to be a specific allocation of funds....I think there has to be some difference for supporting this program than the traditional funding formulas in order to be able to meet the needs of the small companies which has



small numbers of people who need to be upgraded....

- The only money we have available right now to provide short-term response is adult extension money and it would create a problem to try to respond to an organization's needs with traditional money....

 Currently some of the community colleges relieve money to do vocational education and one of the issues is, should there be two systems offering the same program?

 We don't have a way of accounting or paying for the activity prior to the actual instruction...our accountability is based on ADMs which would not work for what we are talking about...we need state funds to subsidize the up-front work prior to the shop or class activities much like we now have for our regular programs....
- We need to guard and see that the activity has an allocation for a specific amount of funds....
- If the funding is based on ADM there will not be a postiive effect....Funding needs to be dedicated.... the state agency could hold some of the funds and the AVTI could have part of it up front....the front end development should be covered by the state, if they can do that, we can generate the business....
- ib The AVTIs are getting too much money from the state and not enough from the users....



î. **51**

- 1b I'm not sure there is a need so I don't Know how it would be different than adult education....
- 1b I don't expect the state to pay for the development of an organization's workers....
- 1b I think it would be easiest to get the money as a lump sum in the general budget....
- 1c The lowest level you can earmark the funds at, the better off you are going to be....
- I think they could include it as part of adult education...it should be identified somewhat separate from general Voc Ed funds....
- the program needs to be fiscally accountable which may give the AVTI some incentive to actually become a revenue type function....
- 1c I don't know if I have an opinion...thats an internal
 state problem....
- 1d They need to make a sufficient specific investment to ensure that the program can work....
- If there is going to be a true partnership, then
 the benificiaries of the process should make a
 contribution....to specifically earmark it would
 put potential contraints on the program....I think
 there should be a specific pot of money given to
 the state vocational education but the dispursement
 be up to the voc ed program....I think there should
 be a specific piece of money earmarked for that



program, but give it to the state department of vo ed for dispursement as they see fit based on the quality of the program of the respective AVTI service areas.... some service areas are not going to need as much help. as other areas, to wit the matro area....

- 1d Through the central administrative structure....
- Id Firms come and go for a variety of reasons.... I would not like to see the vocational education system bent out of shape to meet the need of attracting business to the state.... I would rather have us foscus on providing good solid quality vocational education for the bulk of the population and treat the business of attracting firms because of an attractive training program as a marginal activity....
- There has to be two levels of disbursement and funding...one at the strategic upper level and one at the implementation and delivery level... a dual funding would be good with other agencies than vo ed involved in requesting and contributing funds to support this program effort...
- 1e Ultimately, the money has to be tied to agencies which are currently not interacting as fully as they should with the AVTIs, that is to somehow establish a functional dependency between those agencies which interact in a direct or indirect sense with the labor market and those agencies



which are involved in manpower training....

- There needs to be a guarantee of economic stability for a long term, say 4 to 5 years, for this program before people are going to be willing to commit themselves to the effort....a specific allocation or perhaps an endowment....you don't know the path it will take or the implications, therefore, you need in the funding cycle a flexibility to gain short notice access to funding to meet the unexpected....
- 1e If this program is viewed as a real boon for industry, then there may be a chance for funding from that sector....

Responses: Cost Assessment

- 2a We don't have a way to cover the costs of the activity prior to the delivery of the program but I don't know how the cost should be structured or priced....
- 2a I think the user(s) should pay....if they are having economic problems then we need a mechanism to help them....
- 2a I like the system we currently have where your administrative salaries are covered and the company is covering the costs....
- 2b My feeling is that the AVTI needs to be competitive with the private vendors who are offering the service... they change formulas about how they arrived their price and it was easier to purchase the service from a



- vendor....I worked with several AVTIs and they all had their own way of caluclating our costs....
- 2b The user should be billed for all the costs....
- 2b All the costs should be carried by the user....
- 2b I think they should be shared....I suppose the coorporation has a greater responsibility....
- 2c There should be an established formula....
- Initially the funding for staff and development would be funded by the state....the other costs would be charged back....
- I think there should be a formula....the user needs to share in the cost....I'm going to use the criteria of what I'm getting for my money....
- It wouldn't seem unreasonable to have a 50/50 split on the cost...the organization is going to feel it has a vested interest....if you have an investment you will see a lot more concern and support for the program....
- I had thought of the public money being used for the broader clusters of educational efforts that the private sector would not want to pay for...the AVTI could take some its money and leverage it into the private sector to meet the needs of the private sector...if there is limited amount of public funds the leverage money should be restricted and the user absorb the majority of the costs associated with this program....



- I would have the employers pay for that part of the training which is unique for their firm and I would have the public continue support for the proportion transferable.... I would have employer pay for needs assessment, job analysis and evaluation activities....
- The public sector should be made to operate like the private sector with respect to that business otherwise it will drive any entrepreneurial efforts out of business because they will have a monopoly on that kind of activity....
- 2d If it's in the interest of the state, the cost question does not have to be considered....if its not in the interest of the state, it shouldn't be done at all....
- You would have to share the cost...the state should fund the program development and maintain the staffing and the user should pay for the direct costs and time of the staff person....
- 2e A formula that divides the cost....there may be a way of looking at the benefits and accessing the benefits and allocating the cost accordingly....if there is shared cost there is ownership which makes it more valuable....
- 2e It is a complicated issue because education is a public good although there are several spillover benifits....

 we should provide an environment conducive to economic



growth not subisidize organizations directly....there is a fundamental dilemma in that people can walk with the skills....

Responses: Use and Disbursement of Funds Generated by the Program

- I would favor allowing the institution which provided the program to retain a portion, if not all the income generated by the program, to reward the entrepreneurial activity...it becomes a matter of economic despairety depending on the location of the institute...one activity that can be done from a central position is to subsidize or encourage activities in economically weak areas of the state....I would see the state underwriting those programs which have the most essential and long range impact....
- 3a Should it be kept at the AVTI? Yes....Should it be dedicated? Yes....should some of the money go into a pot to aid economically weaker parts of the state?
- Sa Some of these services should be profit producing....

 the funds should stay within the program to further

 develop it but should be at the descretion of the AVTI

 director....
- 3a Cost of instruction should be a shared responsibilty between the organization and the state.... I think it's healthy for the company to bear part of the cost....



- I like the entrepreneurial approach...I don't think its fair to take the money and ship it to another area just because they've given away programs and not properly priced their programs....I am strongly opposed to a uniform charge formula across the state, my preference is to leave it up to the local school....
- I'm going to look at the agency as another vendor and I'm going to be concerned with quality, if the quality can be achieved by retrenching the money fine....if its not needed, thats fine too....
- 3b Problably designated in some way....it shouldn't be allowed to fall into a black hole such as a general fund....
- 3b My preference is that income from a specific program return to that program....
- 3b I like to see the AVTI keep it to use it as they feel fit....
- I think there would have to be some sharing of the wealth in order to get the thing off the ground...

 eventually it should be based on market needs....you should allow the one who doesn't to fail...
- 3c I would like a dual system so the AVTI has a even better even chance of using the money....
- 3c The majority should stay in the AVTI although some of it should go back to a general fund...generated funds should be allowed to carry over into the next year



without penalizing next year budget of the AVTI....

If they are going to build up a reserve with this money they may be penalized by a reduced allocation...the 15% reserve clause should be honored...whether its kept at the AVTI or sent to the state, the money should be plowed back into developing this program...If the money is kept on account, then the contributing AVTI should be able to draw it out later if it needs it, also it should be available for other AVTIs to access if they need to....

- I would move to a venture capital situation where the money would be kept by the AVTI....it should be very descretionary within some very general policy guidelines....
- I don't see this as a revenue producing function...

 The AVTI is in the business of serving the public...

 issue is how much are resources drawn away from

 the public client to serive a special organizations

 needs...that doesn't mean they don't accept gifts...

 One of the benefits will be to generate and shift

 resources from declining program areas to new needs
 and programs...
- The money should stay at the local level and be set up as a revolving account to generate new programs...the AVTIs deal with technical programs which often become obsolete and then they don't have funds to update....



- you could put a cap on it after which everything reverts back to the state....
- Je I get nervous whenever I hear of things transferring back into a pool of money or a slush fund...needs will arise that no one can anticipate so you want to work a piece of that back....
- 3e I think its better to keep the savings close to home....if there is a regional effort then that's where the returns should go....to be used for a curriculum development fund...



Table 2

Key Response Phrases re: Program Service Profile and

Cápabilities

General Question: In your opinion, what should be the scope and focus of the AVTI training program with regards to:

- human resource development for various types of roles within the hierarchy of organizations, and
- types of activities specific to training programs within business and industry.

Question Code Phrase Key for Responses

- a = postsecondary vocational education
- b = large metro-based purchasing users
- c = small metro- & nonmetro based purchasing users
- d = professional preparation institutions
- e = strategic users

Responses: Human Resource Development for Various Types

Of Roles Within the Hierarchy of Organizations

- The AVTI should focus on the workers themselves...

 they might be able to deal with the upper level but I'm

 not sure that AVTIs have the skill, internally or

 available in the region to provide upper level

 services...
- The technical for sure....It's a hard place to break off...when you get into the supervisory and management areas it gets real grey....We get a lot of requests for



practical good gut level management skills and the AVTI seems to be the place where you can put together the packages to deliver it because we offer it as an occupational skills program rather than a piece in a theoretical program....

- A lot of that is going to be dependent on how we market ourselfs technically definitely management training up to a certain level, but certainly small business management....I don't see us taking existing training jobs from business but I see us providing supplemental services....
- I feel vocational education and this program can take
 many forms and address many areas including management
 as well as technical....
- 1a It depends on where the AVTI is located and what the economic state of the area is....
- 1b We would use the AVTI strictly for technical training.
- I would be reluctant to have managers or above go through an AVTI program.... I see the first-line supervisors and skill workers going through an AVTI program....
- My perception is that they would provide the technical training needed...to pick up some of the HRD program dealing with behavior development would take a lot of development work on their part and be approached cautiously by us as a user....



- I see the AVTI dealing with the first-line supervisory level training and on down.... I see control of training dealing with proprietary information as staying inside our company.... I see some small companies not in the metro area looking to the AVTI to do some management training because of the lack of vendors, staff, or knowledge to develop this type of training....
- I think they would stay in the technical area...the image is pervasive in the twin cities area...they would provide a very important service to small and outstate organizations in the other areas of their organizations....
- It seems to me as though it would cost too much to develop training capability at the AVTI for executive and upper management training....
- AVTI should provide skills training...they don't have the ability to offer the other services at this time...it would be important for small companies to get a comprehensive set of services they could choose from because to purchase parts of the needs from a variety of vendors costs more money and there is a lot of overlap....
- 1d We need to be aware of the mission of other places so that we don't duplicate efforts...we need to pitch from our strength, what we do well right now....



- 1d Where the private sector can do something as well as the public sector I would ask the public sector to move out of it and address something the private sector is not good at or cannot do at all....
- I think they could handle all the way up in some instances....I don't see anything wrong with them setting up relationships with other institutions, AVTIS, community colleges or the university in order to provide the service....
- The AVTI needs to focus of the worker and job skill knowledge area....that is something they are uniquely qualified to address....
- The AVTI needs to know its niche and where it can be effective...I don't feel it is the the mission of the AVTI to say they are going to do all education for all people in the state...
- In moving from something traditional to something that may be emerging, I think it's necessary to know your competition in order to assess where you fit in....I think it would be a mistake to say that the AVTI should be targeting themselves to the production worker and blue collar sector...there is conceivably a role throughout the hierarchy of occupational titles but one needs to examine who else is serving those needs and what is unique about the characteristic of AVTIs that it can best fill a particular niche....



Response: Types of Activities Specific to Training Programs Within Business and Industry.

- 2a. Part of the problem is the state of the state....Each

 AVTI should have access to that comprehensive set of

 services....certainly the larger schools or clusters of

 schools should be able to work together to offer the

 services....I'm not sure what the delivery mechanism

 will be but the state should be able identify the

 service needs and the resources...
- 2a It is not fiscally possible within the constraints of the current system...A regional approach would probably work especially in the out-state areas....
- 2a I think there would be an unecessary duplication of effort if each AVTI developed all of this capability...
- 2a We would not expect them to be able to do needs assessment because of the variety of cultures in the organizations...we would establish the objectives.... we would look for design capabilities....
- 2b Yes, absolutely...the full spectrum...

 The total system should offer the total service....I

 don't think there should be a lot of overlap....
- 2b Certainly assessment....all of them....total program...
- It would be very helpful if people coming into the AVTIs are skilled in these areas but I'm not sure the state should be involved in long-term organization development....



- 2b I wouldn't see a need for them to be able to do anything more than curriculum development and delivery.
- There may be a need to share services at the beginning but eventually organizations should be able to get all the services from their regional AVTI
- 2c Needs analysis, curriculum development & design skills, ability to plan and coordinate the delivery of programs...
- 2c Each AVTI needs to make its own decision about what range of services will be offered and where and how they will provide those services they don't want to specialize in...
- I don't see why they shouldn't be able to if they want to; why put a limit on them?...it would be a noble thing for them to do but I don't know if they could do it staff-wise....
- They should be able to purchase all of these services (needs assessment, work ar. /sis, program development, delivery and evaluation) from the AVTIs....AVTIs should set themselves up to be training cooperatives....
- 2d We need to provide a full range of services....if it should exist at each AVTI is going to be depend on what the demand is....it may make sense to start on a regional basis....



Table 3

Key Response Phrases re: Supporting Organizations and Administrative Structures

General Question: In order to best serve the user groups in the state, what do you perceive the administrative and management structure of this program to be with regards to:

- 1. overall strategy, service coordination and delivery,
- 2. its relationship to the current Adult Education Program?

Question Code Phrase Key for Responses

- a = postsecondary vocational education
- b = large metro-based purchasing users
- c = small metro- & nonmetro-based purchasing users
- d = professional preparation institutions
- e = strategic users

Responses: Admistrative and Management Structure

- It has to follow the proposed governance plan and go to a regional plan....
- 1a My hope is that we form some sort of clusters or regions based on some sensible method and the director has an assistant responsible for the program....
- We may need a cadre of people at the state to sell the program so the local schools can focus on delivery....
- 1a I don't think there should be a central structure to manage this program...competition will create



◐

better service....it's best the weak ones fail....

- In I think the state needs to direct statewide policy and strategy but the local AVTI should retain local control
- We need a form of central coordination effort...we need someone pulling the program people together to train and coordinate a network effort across the state....the actual day-to-day operation of the individual programs should be at the local level....
- I would say decentralized, but on the other hand, I don't think the AVTIs currently have the skills and the central program would be better able to attract the caliber of professional and skills needed...one phone call to take care of it all would be beneficial....
- 1b A central organization would provide consistant quality and allow a one phone call access to a variety of programs for a number of regions and areas....
- 1b There needs to be some central coordinating group to help guide programs to meet the needs of organizations and regions....
- The closer you can get things out to the operating unit, the better things operate....reasonable autonomy is important....
- I'd like to see a central function that I could call up and say this is what I would like, or I need this in a particular geographic or series of geographic areas, and have someone else take care of contacting the



- appropriate AVTIs and people....
- What is being suggested is foreign to what the AVTIs currently do....I don't think the people who are currently administering the AVTIs know enough about the needs and expectations of organizations from this other type of program....
- The more local control you have, the more responsive the program can be to needs of organizations in the area they service....
- ic The AVTI director should have direct control....
- I think the local agency should be allowed to go its own way....they will know what the unique needs are within their service area....
- I think there has to be a central strategy to develop the capability in the AVTIs....as the program grows it needs to be assimilated into the existing AVTI structure, but initially it should be given its own resources, and high visibility, and so forth so it can mold itself; it will then either fly or not fly....
- I really think administratively you need to have a control for the ongoing program...there should be someone at the state who works out the formulas and sets policy but the program needs to run from the AVTI....
- 1e I think it should be driven from a central organization



because all these agencies need to work together much more than they do and to improve their coordination... there is an economy of scale associated with data collection and analysis from a central location...

- 1e The AVTI director needs to have control and accountability....
- On a regional level you could pool the resources to get a critical mass where you could diversify a variety of expertise....you get a variety of options at a regional level that you cannot get on an individual AVTI level..

Responses: Relationship to Adult Education

- 2a I think there should be under adult education....
- 2a I think adult extension is the only way to go....
- 2c I think they should be linked together.... I think they could be handled under the same management...
- 2c I don't see a need for a link....
- 2c A coordinator for a regional effort would be justifiable.... it also would be necessary to have a coordinator at the state otherwise you would have these individuals duplicating resources or going down parallel streets and not talking with each other.
- 2c They should be linked....advantages are not duplicating administrative structures already in the school....
- 2d It would fit very nicely under the adult education umbrella....the nature of the clientile....the adult education program is better designed to cooperate on



- a program of this nature....
- You may want to make this program's responsibilities part of the adult education activity and move some of their more established activities into the mainstream efforts of the traditional programs as enrollments there decline...
- 2d I don't see that it needs to be related....
- 2e I think they are two different things...this is much more tailored to the specific needs of organizations and not the individual's needs....
- 2e I see it magnifying the current adult education effort and it will reveal the real capability of the AVTI to service....



Table 4

Key Response Phrases re: Professional Development.

Qualifications and Selection

General Question: From your perspective, in order to have the professional credibility that will encourage user groups to solicit this program through the AVTI, what are the key elements for consideration with regards to:

- 1. professional preparation and qualifications,
- 2. ongoing professional development,
- 3. selection of professionals.

Question Code and Phrase Key For Responses

- a = postsucondary vocational education
- b = large metro-based purchasing users
- c = small metro- & nonmetro-based purchasing users
- d = professional preparation institutions
- e = strategic users

Responses: Professional Preparation and Qualifications

- Skills in needs analysis, program development....a

 broad variety of industrial and business skills....

 credibility is going to be very important....
- 1a I think the private sector is where these people should come from....
- 1a Knowledge of vocational education programs...able to do a minimum needs analysis....



- I see a need for the state program to provide training to the individuals who are selected to the postions...

 Number one as far as I'm concerned is that the person come from the business and industry that they will be serving....The jury is out as far as I'm concerned if they should come from a formal degree program....
- The coordinating professional or program manger should have experience in business and industry, in training and development....I would not repect someone who came from an academic preparation or was a teacher in an AVTI....
- I would hope they would have a background in adult learning, which I haven't found in the AVTIs....they need to know what it is like in an organization, what organization life is all about....they need design and instruction skills....
- 1b Its critical that we deal with people who have had experience in industry....
- It is real important that the individual have had some business and industry experience....in a managerial role....not necessarily in human resource development....
- I want someone in that role who can understand the business needs of this organization in addition to being able to help us meet our training needs....they



65

should come from a training background...

- The kinds of skills would be the technical skills they have learned....absolutely have had business experience as someone who had managed and not as an analyst...an advanced degree beyond a bachelors....
- They would have to be able to communicate with a wide range of businesses and organizations...they would need to be able to speak the language...people at AVTI don't the understanding or capability to meet the rapid reponse needs of industry....communication skills, industrial experience either in a line or staff position, there should be a minumum of bachelor degree....I don't think a person with an education degree and only education experience will be successful without a big stretch...they would have to have management abilities....
- I think individuals need to have experience in the area that they will be working....professionally trained as trainers with some industrial experience....
- I would see a need for them to be able to carry out all the activities normally associated with any training related effort or problem....they should know how to teach, understand and be able to work out the financial budgets....I think they need to know something about the employment sector...
- id The demonstrated capacity to provide very strong



74

leadership....the fundamental skills and knowledge of the training and development profession...knowledge to carry out the first two....

- I think at a minimum they should have the formal training of the program at the University of Minnesota or something like it....it shouldn't be easy for just anyone to claim they are a training and development specialist....a bacheloriate degree should be required if for no other reason than the prestige, credibility or image associated with the individual who the users of the program would be interacting with....
- 1e I don't think a strictly academic background is going to cut it...a minimum of teacher and/or professional certification if they weren't going to provide instruction....
- The person must be a communicator...must be able to understand from a business perspective what is neededmust be able to facilitate....
- I don't see one person having all the skills needed to do the work that would be needed....a set of skills would include political skills to deal with executives and communities, implementor skills for a management type of role, and specific marketing skills...ability to write, use the media....curriculum development and skills....



Responses: Ongoing Professional Development

- Individuals should be allowed to continue to engage in professional development activities...the time and the money should at least be shared or underwritten entirely by the insitution doing the hiring....
- I'm not convinced that the training the University is doing over there is applicable to what we are trying to do.... I would like to see the AVTI program and the university program working closer together....
- This is a real political issue...who should deliver inservice, and what is it?....I think the University has a responsibility and a role in providing formal instruction and training and inservice training... the University has not always provided what the local people want or perceived they need....money should be made available as well as opportunities to work with a private organization on an internship basis....
- There should be a competency chart for the job...where the person needs to improve they should do so...the system should not be responsible for taking care of the individual's personal goals...our degrees don't tell us that much or what they can do...college is not for everyone...they should come with competence in the areas I need whether they get it in school or industry.
- 2b There are some training and development departments within public organizations in which they could



- intern...actually go through a four-month experience doing needs assessment, evaluation and the rest of activities....
- 2b Internships....knowledge of organizations is hard to learn in a classroom....
- 2b Certainly some HRD training...link up with HRD people in organizations....
- 2b I think they should be able to go back into industry and spend some update time periodically....
- If you havn't got the fit, the program won't fit....

 if you have someone who doesn't, but you try, you pay

 for it over and over again...there is too much of that

 going on now in the AVTI system...I have personal

 difficulty hiring someone who has just formal education

 and I feel you need to have spent some time in a small

 organization rather than a large one with a well set up

 training department and program....
- Each person in this position should be required to rotate and have leave from their position periodically to work in business....something that keeps them in contact with what employors are really doing...what are the real economic problems...
- 2d I would say required breaks for professional upgrading studies....
- 2d If you want to play first league, then you have to see how the first league plays; you need to go and see



77

how good programs work....

2e I think the best way is to have an internship of a minimum of one year....

Responses: Selection of Professionals

- We have a problem in that every time you hire someone for over 60 days you have to put them on a continuing contract and we need to be able to hire on a project-by-project basis....There are some real hang ups with the state teacher's union, state employment laws, and the state licensure...
- I don't know if those issues will be any different for this particular position than anyone we hire for any position...it's something we need to be cognitive of but I'm not sure what the solution is...we have limited input into what goes into current hiring contracts.... if they will be considered administrators then we will probably be okay but if they are hired under teacher contracts then we have problems....
- 3a I think its a good idia but not necessary....
- 3a Probably not...the AVTI needs to be astute enough to know what they need....
- 3a Yes, I agree with that whole heartily....
- I see this as a staff position, which is a licensure position and you get caught up in the teacher schedule issues and guidelines for hiring... I think it's good if you can have input from outside business and industry...



- 3a I don't think education will ever see a true evaluation system...
- 3b I don't feel a need for the users to be involved unless the person who was doing the hiring didn't know anything about business or training....
- 3b Strategically it might be smart to get some convership because initially the private sector may not view the AVTI as a viable resource....
- 3b I've got enough to do....I don't need to spend time helping the AVTIs staff....our organization is not interested in helping AVTIs to develop programs....
- 3b I think seniority often can constrain you from getting the right person....
- The selection process should be outside the current selection process....I'm not so sure they are objective about who they hire as much as they are concerned about filling the position before they lose the money.....
- If you have users having input into the process, they would add an element of reality....you would have some valuable input from the practical side that may not be happening now at the AVTI...if I have a voice in the selection process, I will be more confident in purchasing services from the AVTI....
- I think they could set up an interview schedule with representatives of the user group...maybe they could set up a meeting with the AVTI advisory board....



- 3c I think that might be a good idea...
- 3d I think the interest of the user needs to be represented....
- 3d The advisory committe for this AVTI should help set the criteria and guidelines for the postion...I don't think they should have the final say however, that should be up to director....
- 3d Yes, users need to assure themselves that the person selected will leave final curriculum decisions up to the user....
- 3e Definitely....
- 3e The program should have its own advisory group which could have input into guiding the hiring policies and .selection...
- 3e You're going to have to have input from other agencies and organizations because they are going to have to work with this person...



Table 5

Key Response Phrases re: Evaluation of Program and Professional Activities

General Question: From your perspective, who should be involved in what type of evaluation activities with regards to:

- individual appraisal systems for individuals managing or implementing this program,
- review and evaluation of this program's effectiveness.

Question Code and Phrase Key for Responses

- a = postsecondary vocational education
- b = large metro-based purchasing users
- c = small metro- & nonmetro-based purchasing users
- d = professional preparation institutions
- e = strategic users

Responses: Individual Appraisal System for Individuals Managing or Implementing This Program

- 1a It ends up being a personality thing which makes them successful....
- ia The employer is going to tell you how well an individual is performing by continuing to purchase services....
- 1b. The user should have some input as well as the others in voc 2d who have direct knowledge of the individual's



performance....

- The user should have a say....the extent to which you get the end user involved, more involved they will be with the total program....
- You ought to err on the side of what is being done in business....
- 1b I think you evaluate them the same way you evaluate any other instructor....
- ic There needs to be some sort of required standards....
- 1c They should be evaluated by special criteria and should include input from the people they service....
- ic Part of the evualuation has got to come out of the satisfaction of the user....
- I think since this program works very close to the market, the market needs to be the best evaluation... in contrast to traditional types of programs, the evaluation is going to have to do with ethics in that the individuals are going to be faced with doing things in response to requests that they may disagree with....
- id I think it should be an on going process based on followup of each program delivered....
- 1e A good system appears to exist...I'm most concerned about the evaluation of heads of these programs....
- 2a I don't have a lot of confindence in the current process of evaluating programs...evaluation to me suggests that you have an established criteria that



you are going to go in and evaluate on...before
we can evaluate we need to Know what we are going to do
with what we find out...it's a self-serving activity
which spends a lot of resources and time....

- 2a The system should reflect emplorer and participant satisfaction....
- 2a I think the critical part is the user...if that
 employer can economically measure growth then we know
 we have done a good job....
- The individual is going to have to prove their existence to whomever they report to...they are going to have some enrollment or other mechanism to evaluate the activities....we had success in other programs but do to the drying up of legislated funding we have had to stop the program....it's going to be tough because you have other agencies also trying to do the job you're trying to do....
- The state agency needs to have its own internal way of assessing success or failure.... I wouldn't mind seeing the user group used for establishing criteria and for interpreting the outcome of the evaluations....
- 2b The user, the central state coordinator and the AVTI director....
- 2b Definitely the director in collaboration with input the user group....
- 2b I think the users should be allowed into this process..



- 2b You'll be a vendor with a client and if you don't meet their needs then they won't be back....
- 2c If it's going to stay in that business it needs a method for measuring client satisfaction and just not a smile method....
- 2c The users and the administration should be involved in the program evaluation....
- 2c We need to look at the financial impact on the state of Minnesota...there should be an evaluation each time a service is provided...in the begining years there needs to be an independent third party evaluation...
- It needs to be more of an audit....are funds being used efficiently and effectively....because you are close to the market this will have most value as an evaluation effort....
- I think the current system the state uses does a decent job and until it proves itelf otherwise I think they should continue to use it...first of all the mechanism is set and second, they have a vested interest...if the users do it, there may be some biases, say against an individual that would not provide an objective evaluation....
- 2e Ultimately what you want to answer to is this needs assessment...you want to involve users but they must be kept in perspective to ensure that they are not setting double standards....



- You can do like the job skills partnership act where you tie the business right to the program where if the program is not working they pull cut their support.
- 2e I think the way adult extension does evaluation should be used as a model....



Table 6

Key Response Phrases re: The YoEd Program Role in Larger

Economic Strategies

General Question: From your perspective, what strategic vocational education training program working linkages would improve program efficiency and ensure maximum program impact within the state of Minnesota with regards to:

- 1. Key organizations in the linkages,
- 2. format of the linkages.

Question Code and Phrase Key for Responses

- a = postsecondary vocational education
- b = large metro-based purchasing users
- c = small metro- & nonmetro-based purchasing users
- d = professional preparation institutions
- e = strategic users

Responses: Key Organizations in the Linkages

- There needs to be a very close relationship between the economic development and education at a state level...I see economic develop going off in one direction and the state education agency going off in another....It would be useful from a legislative viewpoint if we could have those two agencies come together with funding requests.
- It is critical that there is a link between economic development and the AVTI structure...the AVTI is unique in its ability to deal with the identification of those



- companies which need help....
- Yes...econmoic development....the whole relationship should include joining up with several of the existing program functions such as the jobs and training organizations....
- These are boondoggles....they spend more money on coordination than we spend on doing it all....
- 1a That's an area that I'm surprised that there has not been a more formal link...the economic link is vital...
- ia We need to have a link with economic development....
- If we don't know what is needed by organizations coming into the state we will not be able to meet their needs...economic development should be the organization with this information....
- 1b There should be a link with energy and economic development....
- 1b It seems reasonable to have a linkage with economic development people....
- 1b If the goals and objectives relate to other agencies, then there should be a linkage with economic development, job securities and others....
- There ought to be some communications with other state organizations such as unemployment and job services...
- I think that this could be an income producing effort..

 and it should be linked appropriately with the state's

 other state systems....there are content experts which



to the Edithinish Day in the Co

- need to be consulted when the state makes strategic plans....
- ic Links yesespecially with economic development, but should one be part of the other, no....
- 1c Yes...it would add credibility to the program if it were operating with the support of other agencies....
- I would encourage linkages....with the university and other economic oriented state agencies....
- 1d No question that there needs to be a link with economic development....
- No....I don't think voc ed should be involved with economic development strategies but should focus on responding to needs identified at the operational level....
- You really need it...there is so much overlap especially in this area of customized training of funding....
- 1e Absolutely, there is no question in my mind that until you do that, you don't have policy driving anything....
- ie Absolutely economic development....

Responses: Format of the Linkages

Its a real fuzzy one....I don't know why some things have gotten placed under economic development or why other things have been placed under voc ed....It would be nice at the state level but all the activities take place at the local level....you have state economic



- development working strictly at a state level and not working out in the state with other organizations...its
- 2a It's always our goal make linkages among people at the local level...I'm not sure how to make it happen...
- It should start at the top...the heads should make a commitment to develop an overall strategic plan...perhaps all of the postsecondary systems should be involved as they all have a role to play... often people who are identified or funded by a separate task force or organization are viewed as outsiders and don't have a chance to be effective...there needs to be someone focused on this issue of coordination...
- There has to be some sort of state connection...

 functionally you're better off at the regional level...

 I think ideally that the economic development offices

 at the regional level need to be in the AVTI....
- 2b At a regional level, there should be inter-agency communications...it should include representatives from the user sector....
- 2b There is going to need to be at least a 50-50 partnership if its going to be successful....you have to have an influencial stakeholders group....
- There only needs to be a communications linkage....I

 think also having an advisory board would be a good

 way of handling any links that are needed....
- 2c The users should be involved....



- 2c Maybe form a board of directors with people from these agencies and with people like myself so constituents are represented....they would set directions and direct funding....
- 2d An advisory council made up of people from around the state would give a good statewide perspective of the needs of the program....
- I don't know about the formula for the linkage but there is a need to have all the elements necessary for coordination established and in place....
- I hate to recomend another committee, but you'd need representation form all groups to discuss common concerns, resources, areas of interest and availability of services...when you do this, you are raising standards....
- I don't see any greater contribution that vocational education than to be part of a regional economic strategy....
- 2e An advisory board or council involving all interacting organizations and sectors that they service....You could have a person at the commissioners level who is responsible for corrdinating interagency activities....
- You need something like a strategic plan...all of the organizations need someone like an assistant commissioner meeting frequently on a roundtable...their sole purpose is to represent their agency with respect



to this strategic goal and plan....

The action is at the regional level...I don't think the type of planning needed is going to happen at the high state level....



Key Response Phrases re: Equity and Access Considerations

General Question: From your perspective, what types of considerations do you see necessary with regards to:

- incentives and/or subsidies for oganizations to want-to take advantage of this program;
- use of public funds to underwrite portions of training costs for individual organizations.

Question Code and Phrases Key for Responses

- a = postsecondary vocational education
- b = large metro-based purchasing users
- c = small metro- & nonmetro-based purchasing users
- d = professional preparation institutions
- e = strategic users

Table 7

Responses: Incentives and/or Subsidies for Organizations to Want to Take Advantages of This Program

- There are so many organizations that offer educational money that in my perception nobody knows where to go to get funding....
- I would very much like to see part of the money generated by the program used for subsidies to support organizational training needs....
- I see a need in the area of small businesses,
 especially new small businesses...most of them are
 not in a position to do much about their needs....



- I could be persuaded to take a little off of each dollar I take in and use it for a pool to help some of these needy organizations cover the costs....
- The tax advantages should be given to small businesses to encourage them to use the AVTI as a way of accessing new research....
- The "vo eds" do not need to be involved in setting up incentive programs or criteria for special aids....
- There are so many political games played that I have reservations that some organizations may be suffering and hurting....they are so hard to police....maybe a sliding scale arrangements....
- 1b I think a pool of money ought to be available to aid on a case-by-case basis businesses which are in trouble
- 1c Simple, Keep it low cost....
- 1c A lot of small businesses don't know how to evaluate their own business....being able to get free analysis would be helpful....
- 1c I can't see any need to establish additional tax
 incentives....
- It's a fact of life that the state has a variety of organizations and programs to provide incentives to business and I don't think vocational education should be involved....
- 1d Vocational education's primary concern should be to provide sound educational oportunity for people in



the State of Minnesota...if it can help business in other ways, it should, but it should not be in policy making....

- Id There are already several tax laws and state subsidized programs to help in this area...we don't need any more confusing the people who need help....
- 1e If you could provide tax credits for people being upgraded it would be helpful....
- 1e Each region of the state should be given some grant money to aid businesses in accessing the AVTI and its training programs....
- I not sure there should be government intervention in an environment of market imperfections...if you have people falling throught the cracks maybe they shouldn't be caught...

Responses: Use of Public Funds to Underwrite Portions of Training Costs for Individual Organizations

- 2a As long as any company has the right to ask for the same type of services, I don't see a problem because it is for the good of the state....
- When you come to the University or the colleges those issues never get raised...it's been an issue as long as I've been with vo ed....When the university get a block of funds, they can divide it up any way they want but it seems that whenever voc ed get any money, the legislature wants to designate every penny... those



- companies are paying taxes and that company down the road has the same access to the training services....
- 2a We're supposed to be out there helping business to be successful and thereby to generate more taxes....
- 2a I really don't see this as an issue....
- Who are we going to provide this customized training for...we need to understand the economic and development strategies of the state?..are we willing to take reasonable risks and deal with the consequence of failure?...wha: are you going to do for training for industries which certain segments of the population might find offensive?..is the program morally neutral...
- In this organization training is done on a seniority basis so that's not an issue....I'm not sure it's even a general issue....it is not a thing vocational education should be involved in decisions about this...
- 2b I don't think you'll ever get perfect equity....If
 you worry about perfect equity you never get started...
- I would see them being a vendor to whoever wanted to purchase the service and so there shouldn't be any issue....I don't see it any different than what the state does now through other offices....
 - I like to say not an issue...no matter how or what you do, someone is going to feel slighted....
- 2b We identify the needs and we give the people the skills they need all the time...we do it all the time...



- I wouldn't see the state providing a subsidy any different than it does in other ways....
- 2c It looks like it may become a political basketball being tossed back and forth....
- 2c The state may ultimately benefit most as revenue returned to the state may exceed the states initial costs....
- 2c I don't think this is an issue at all....
- 2c We may be creating a large animal which may not function and yet continue to subsidize it and provide an unfair competition to traditional vendors....
- 2d We don't want to be labeled as a welfare agency for private agencies and providing them with perks when they get into trouble....
- In a way, I don't see anything wrong...everyone will benefit...the alternative is that members of a work force may become welfare recipients....
- 2d This program should not be the grand new scheme at the expense of the traditional .programs...
- You can't be all things to all people and the goal is to upgrade human capital....the goal is not to serve as a redistributive entity for taking wealth from one and giving it to another....any issues are not ones which should be addressed by the AVTI or through the AVTI....



2e I don't see where it is any different issue than what we have had for years and years with any other systems in the state...there is public money in our other systems and programs also to some extent....



Table 8 Domains of Interest Views on Fiscal Resources and Management

<u> </u>	-					
Views on Funding	A	Domains B	of In	terest D	Ε	
A mechanism other than the traditional funding (ADM) mechanism is needed for this program	***					
Money is needed for upfront organization service needs assessment & AVTI program development	***				*	
Funding for program should come from user sector		*	*	*	*	
Funding should come through adult education		*	*			
Funding should be specific and at lowest level possible with 100% Vo Ed control			*	**		
Funding smould come through general funding		*		*		
Funding should be allocated on as need basis from other agencies who have stake in program area					*	

Key : a = postsecondary vocational education

b = large metro-based purchasing users

c = small metro- & non metro based purchasing users
d = professional preparation institutions

e = strategic users

* = each independent submission of view from group



Table 8 (continued)

Views on Assessing Costs to Users	A	Domains B		nterest D	E
Need consistent formula across all AVTIs to calculate cost & need to be competitive with private vendors	*	**	***	*	*
Vo Ed pays administrative & user pays direct costs	*			*	*
User pays all	*	**	*		
User pays greatest part of cost		*		*	
If it's in the interest of the State, Vo Ed pays 100%				*	*

Views on Disbursement & Use of Generated Funds	A		of C	Interest D	E
AVTI should retain all & use at discretion of director	***	***	*	*	***
Funds sent to state are used to expand training program	***			*	
Generated funds should be allowed to carry over into next year without budget penalties			*	*	



Table 9

Domains of Interest Views on Program Service Profile and Capabilities

Views on AUTI Ability to Train Different Job Roles	A		of C	Interest D	E
Lower Level Technical	***	***	**	*	***
First Line Supervisor	*	**	×	;	*
Management	**			*	*
Views on Types of Training Activities at AVTIs	A	Domains B	of C	Interest D	E
Comprehensive at each AVTI		**	*	** ***	
Regional Service Capability	***				
Curriculum Development & Delivery Only	*	**			

Key: a = postsecondary vocational education
b = large metro-based purchasing users
c = small metro- & nonmetro-based purchasing users
d = professional preparation institutions
e = strategic users
* = each independent submission of view from group



Table 10

Domains of Interest Views on Supporting Organizations and Administrative Structures

Views on Program Strategy, Coordination, and Delivery	A	Domains B	of C	Interest D	E
Cluster/Regionally-Based	**	*	¥	*	*
Two Level: State Coordination & Strategy; Local AVTI Curricul Dvelopment and Delivery	*** I um	** **	*	*	**
100% AVTI-Based	*		×		*
Views on Relationship of	A	Domains B	of C	Interest D	E
Program to Adult Education					
Should be related fiscally and administratively	**		**;	÷ **	*
No need for linkages			×	*	×

Key: a = postsecondary vocational education
b = large metro-based purchasing users
c = small metro- & nonmetro-based purchasing users
d = professional preparation institutions
e = strategic users
* = each independent submission of view from group



Table 11

Domains of Interest Views on Professional Development.

Qualifications and Selection

Views on Professional Preparation & Qualifications	A		of C	Interest D	Ε
Individuals should be from the private sector with demonstrated Knowledge of how organizations operate	**	** **	*1	* *	**
Demonstrated Knowledge of needs assessment and work analysis as minimum	**				
Background in Adult Education		*			
Supervisory/Managerial experience	**	***			*
Bachelor's degree minimum			4	**	*
Demonstrated leadership skills				*	

Key : a = postsecondary vocational education
b = large metro-based purchasing users
c = small metro- & nonmetro-based purchasing users
d = professional preparation institutions
e = strategic users
* = each independent submission of view from group



Table 11 (continued)

Views on Ongoing Professional Development	A	Domains B	of C	Interest D	E
Professional Development subsidized by the state	**				
U-M needs to development more awareness of AVTI program needs and address them in joint effort	**				
Private sector internships and update time		** **	×	* *	*
Required break for upgrading				*	
Views on Selection ಾಗಿ Professionals For Program	A	Domains B	of C	Interest D	: E
Need nontraditional selection system and/or contracts to support program	** **				
User should have input	**	*	**;	* **	***
Good idea but not necessary	**	**			



Table 12

Domains of Interest Views on Evaluation of Professional and Program Activities

Views on Individual Appraisal Systems	A	Domains B	of C	Interest D	Ε
Users should have some input		***	***	*	
Traditional instructor and/or staff standard-based rules are sufficient	*	*	*		*
Market should be the evaluator	**	*		*	

Views on Evaluating Program Effectiveness & Efficiency	A		of C	Interest D	E
User should be involved	*** **	** *	*		*
Use current state program evaluation system approach				*	
Follow models of Job Skill Partnership Act & Adult Ext.					**
Market is the best evaluator		*		*	

Key : a = postsecondary vocational education
b = large metro-based purchasing users
c = small metro- & nonmetro-based purchasing users
d = professional preparation institutions
e = strategic users
* = each independent submission of view from group



<u>Domains of Interest Views on the VoEd's Program Role in Larger Economic Strategies</u>

Views on What Key Organizations Should be Linked With Voed	A	Domains B	of C	Interest D	Ε
Economic Development	** **	** **	**	**	**
Job Services	*			*	
These links would not be productive	*			*	
Views on the Format of Such Linkages	A	Domains B	of C	Interest D	E
Links formed at local and/or regional levels	*	*		*	*
Links formed at state level	*				×
Links formed at state and regional and/or local levels	*				
Include user sectors through use of advisory boards, etc.		**	***	**	*

Key : a = postsecondary vocational education
b = large metro-based purchasing users

c = small metro- & nonmetro-based purchasing users

d = professional preparation institutions

e = strategic users

* = each independent submission of view from group



Table 14

<u>Domains of Interest Views on Equity and Access</u>

Considerations

Views Incentives and/or Subsidies	A	Domains B	of In C	t erest D	Ε
Developed incentives and subsidies should be small & needy business focused	*	**	*		
Incentives & Subsidies should not be a concern of VoEd		*	*		
Role of the funds generated by the program in incentives and subsidies	**	*			
These don't need considerations			**		
Role of state resource funds and tax credits		*			**
		Domains	of In	terest	
Views on Use of Public Funds to Support This Program	A	В	c	D	E
No considerations necessary	***	** **	**	*	*
Need to be concerned about the politics				**	*
Is the program morally neutral	*		*		

Key : a = postsecondary vocational education

b = large metro-based purchasing users

c = small metro- & nonmetro-based purchasing users

d = professional preparation institutions

e = strategic users

* = each independent submission of view from group



Table 15

Issues Related to Fiscal Resources and Management

Interview Question: What do you perceive should be the Key issues to be considered regarding fiscal responsibilities for the program under consideration with regard to:

- 1. legislative funding mechanisms and levels,
- 2. cost assessment,
- use and disbursement of funds generated by the program.

Issue: There is a need to develop funding policies which do not rely on current vocational education allocation formulas to support this program activity. There is also a need for a commitment of resources for developing this program without reducing the AVTI's operating fund levels for the development period.

Discussion: Although this was a strong position taken by the postsecondary education domain of interest, there was not any suggestion of sources for this funding other than the same state resource system. A cross section of other domains of interest however did suggest that funding for this program perhaps should come from the both the purchasing and strategic user sectors as well as from state allocations through a matching grant mechanism.



Table 15 (continued)

Issue: There is a need for the development of a consistent statewide formula for developing and allocating costs for the activities provided to users of this program.

Discussion: The purchasing user domain of interest had the greatest concern in this area although there was some agreement about this need from the other groups.

Additionally, these same user groups felt that the cost burden should be shifted primarily to themselves as purchasing users. The postsecondary education, professional development institutions and the strategic users support this concept to varying degrees.

Issue: The is a need to develop policy and attendent guidelines which would allow AVTI directors to retain all of the funds generated by this program without penalizing the AVTIs by reducing their allocations for regular programming during the following fiscal year.

Discussion: This point was overwhelmingly agreed to by all the domains of interest. In addition, the postsecondary vocational education domain of interest suggested that any funds which are passed through to the state, be delegated to expand and improve this training program.



Table 16 Issues Related to Program Service Profile and Capabilities

Interview Question: In your opinion, what should be the scope and focus of the AVTI training program with regards to:

- human resource development for various types of roles within the hierarchy of organizations, and
- types of activities specific to training programs within business and industry.

Issue: There is a need to develop and establish credibility as a resource for capable of providing training for roles above the first line supervisory level if this is to be part of the service to be provided through this proposed program. Discussion: Although the postsecondary vocational education domain of interest felt that the AVTIs could deliver technical, supervisory and management training, the purchasing users felt that the AVTIs did not have the competencies, understanding of organizations or the resources to be able to successfully deliver managerial training.

Issue: There is a need to develop a consistent statewide program capabilities with regard to needs assessment, work analysis, training: design — development — delivery, and program evaluation at all of the AVTIs involved in the program.



Table 16 (continued)

Discussion: The respondents from the postsecondary vocational education domain of interest felt that the total program capability should be developed along geographic rather than along institutional service lines. The general concensus of the other groups was that each AVTI should possess all of these program capabilities. The larger metro-based purchasing users split on this issue based on how they felt they would use the AVTI program.



Table 17

Issues Related to Supporting Organizations and Adminstrative Structures

Interview Question: In order to best serve the user groups in the state, what do you perceive the administrative and management structure of this program to be with regards to:

- 1. overall strategy, service coordination and delivery,
- 2. its relationship to the current Adult Education Program?

Issue: There is a need to develop a two-level management and service structure to serve the training program needs of the users.

Discussion: Although there was considerable opinion provided by the various groups, the majority of opinion favored the development of a central state-level coordination and strategy group to receive user requests and initially discuss and analyze their needs. The role of the AVTI would be to focus on the development and delivery of the needed service. A strong second opinion was that this strategy should be developed around a regional concept. Very little opinion favored the AVTI functioning as an autonomous unit.



Table 17 (continued)

Issue: There is a need to examine the current scope and mission statements of adult education and to modify them as necessary to justify additional resources and staff to address the needs of this proposed new program.

Discussion: It was a strong consensus of opinion among the domains of interest that this program should be administered and be fiscally supported from within the adult extension program.



Table 18

Issues Related to Professional Development, Qualifications

and Selection

Interview Question: From your perspective, in order to have the professional credibility that will encourage user groups to solicit this program through the AVTI, what are the key elements for consideration with regards to:

- 1. professional preparation and qualifications,
- 2. ongoing professional development,
- 3. selection of professionals.

Issue: There is a need to develop and define selection criteria and professional preparation/experience standards for individuals responsible for the implementation and ongoing management of this program which would have high credibility with potential users of this program.

Discussion: There was general consensus of opinion that these individuals should come from the private sector with demonstrated knowledge of how organizations operate. There was however, varied opinion regarding the area of experience and knowledge with a small majority of opinion favoring individuals with supervisory and managerial experience.

Issue: There is a need to establish policy which would require the development of a workable internship-focused, ongoing professional development program.



Table 18 (continued)

Discussion: It was the strong opinion of all of the domains of interest that professional upgrading and development needed to be private sector internship focused.

The postsecondary vocational education domain of interest however, had strong opions regarding the responsibility of the state to financially support this periodic professional upgrading as well as the need for the university systems to align themselves more responsively to the professional development needs of the AVTI professionals.

Issue: The user sector wants to be consulted when the criteria for selecting professionals who will develop and manage this program are developed.

Discussion: There was general consensus that the user sector should be involved in the selection of professionals who would be developing, implementing and managing the training service programs in their service areas. To a lesser degree, and internal to the postsecondary vocational education domain of interest, was an expressed concern that the contract support system be modified to facilitate meeting the service needs of the user in a more timely manner.



Table 19

Issues Related to Evaluation of Professional and Program
Activities

Interview Question: From your perspective, who should be involved in what type of evaluation activities with regards to:

- individual appraisal systems for individuals managing or implementing this program,
- review and evaluation of this program's effectiveness.

Issue: The user sector wants to be consulted when evaluation criteria for reviewing the performance of professionals responsible for this program are developed.

Discussion: The purchasing user domains of interest felt very strongly (with some support from the professional development institutions domain of interest) that users should have input into the performance evaluation process of individuals responsible for implementing and managing the training program in the areas that the users were located. The other domains of interest where somewhat split on the use of the marketplace and current instructor/staff evaluation systems.

Issue: The user sector wants to be consulted when evaluation criteria for reviewing the efficiency and effectiveness of this program are developed.



Table 19 (continued)

Discussion: The postsecondary vocational education domain of interest and the large metro based users felt that it was very important that the users be involved in the overall program evaluation process. It should noted that the strategic users domain of interest suggested the use of the user-focused Job Skills Partnership Act and Adult Extension program evaluation sytems as models for this program's evaluation activities.



Table 20

Issues Related to the VoEd's Program Role in Larger

Economic Strategies

Interview Question: From your perspective, what strategic vocational education training program working linkages would improve program efficiency and ensure maximum program impact within the state of Minnesota with regards to:

- 1. Key organizations in the linkages,
- 2. format of the linkages.

Issue: There is a need to establish formal useful linkages with the State Department of Economic Development (or what may be its equivalent replacement in light of current state budget adjustments).

Discussion: There was an overwhelming consensus that this proposed program needed to be involved in this type of linkage. There was considerable concern that VoEd did not have these links already.

Issue: There is a need to develop a format for useful linkages with state agencies having economic development responsibilities at local and/or regional levels. This format should provide and encourage participation from the purchasing user sector.



Table 20 (continued)

Discussion: The small metro and non-metro group of the purchasing user domain of interest felt the strongest about this issue although the other user groups and the professional development institution domain of interest shared in this concern.



Table 21

Issues Related to Equity and Access Considerations

Interview Question: From your perspective, what types of considerations do you see necessary with regards to:

- incentives and/or subsidies for oganizations to want to take advantages of this program,
- use of public funds to underwrite portions of training costs for individual organizations.

Issue: No clear and consise issues identified with regard to the first part of the question.

Discussion: Opinions provided on this topic were varied both within domains of interest as well as across and among the domains of interest. There appeared to be some opinion across the domains of interest that any program incentives and subsidies should be focused on small and needy businesses.

Issue: There were no issues to be dealt with in the opinion of the domains of interest interviewees concerning the second part of the question.

Discussion: There was a very strong consensus of opinion that if this program were made available to all organizations who wanted to have access to it, there would not be any issues of access or equity in terms of utilization of state funds.



Chapter 6

Summary

Policy Development In A Social Context

"The sociologist is always tempted to play the prophet — and if not the prophet, the seer"

Daniel Bell, 1973

This study has dealt with the identification of issues to be considered when establishing policy to guide the development and implementation of an AVTI-based training services program. These issues have been identified and are presented in Tables 15 through 21. An additional issue that will be identified and discussed in this chapter deals with the social implications and responsibility of public organizations as they evolve and implement policy. This treatise deals with the identification of issues to be considered when establishing policy to guide the development and implementation of programs which could cause social impact.

A contemporary central feature of many current industrial societies is that they may be becoming more and more alike, whether communist— or capitalist—based, because of the common requirements of production, the relationship of education to occupation, and the character of technical knowledge. These needs manifest themselves in similar organizational hierarchies and structures with similar attendent formal communications channels. The concept of postindustrial society emphasizes the centrality of



theoretical knowledge as the axis around which new technology, economic growth, and the stratification of society will be organized.

During the last one hundred years, the axial thread of Western culture has been modernism with its established institutions. The establishment of an industrial worker class has been a vital factor in the shift of the United States economy and society from an agrarian to industrial. During the last one 100 years, this worker group has raised its collective voice in claims for dignity and status, for a rising share of industrial returns, and for a say in conditions which affect work and employment. Many social scientists suggest that by the end of the century, the proportion of factory workers in the labor force today may be as small as the proportion of farmers today to the general working population. Instead of the factory worker, there will be machines; the professional and technnical classes will dominate the work force. Some predictions indicate that this group will be the largest occupational group in society by the end of the century (Saha, 1982).

Energy and machines have and will continue to transform the nature of work. Skills have been broken down into simple components and the artisan of the past has been replaced by two new figures: the engineers who are responsible for the layout and flow of work and the semiskilled workers who are the human cog between machines until technology replaces



them. The organization has been a hierarchial and bureaucratic world of scheduling and pro- gramming the coordination of workers, materials and the markets will continue to do so. In this organizational strategy, workers have become "things" because things can be more easily coordinated. This has led to a focusing by organizations on roles that are ultimately formalized on the organization chart of the enterprise rather than on the person.

At the turn of the century, three out of ten workers in the United States were employed in service industries and seven out of ten were engaged in the production of goods.

By 1940, two numbers of employees in each of these sectors was nearly equal. By 1960, six out of ten workers were involved in the service industry sector and the trend appears to be continuing. In the postindustrial society the significant elements will be workers as individuals. In a post industrial society, services will be provided by professionals equipped by their education and training to apply the kinds of skills which are demanded (Bell, 1976).

Today, social scientists believe that many of the societies in the world are moving from an industrial to a postindustrial era. Some social scientists suggest that the United States may be the society furthest along in this transition. From the perspective of several social and political scientists, three major changes have emerged in the last 40 years relative to the development of Western



industrial societies. The first change was the transformation of the power base in industrial enterprises by the emergence of managers as controllers of the organizations. The second change was the shrinkage of the low and general skills industrial worker group while there has been an expansion of the influence and control by government in organizations through the extension of rules and regulations into the enterprise. The final change has been the rise of a technocratic and specialized skill workers group (Bell, 1976).

An important feature of our current society's labor force is the level of formal educational attainment. In addition to this education, there is a great deal of cultural homegeneity. Unlike the early American labor movement, which had a large diverse element of foreign-born or first-generation workers who accepted lower status as a fact of life, todays workers are relatively well educated and identify strongly with their merican social structure base. Many social scientists suggest that this education and homogeneity will lead the younger work group to develop new demands for control over decisions regarding their work.

Planning

In the world economy, the United States is considered a mature nation and may be in the precarious position of being pushed off the top of the economic hill by more aggressive



countries. Three major factors underly this precariousness. Firstly, only in technology intensive products does the United States continue to have a favorable commercial bal—ance of trade. Secondly, the reduction of the costs of transportation, the difference in wage scales, and favorable import and export laws have made it increasingly profitable and possible for American multinational corporations to manufacture significant proportions of their products abroad as components to be brought back for final assembly. Finally, the United States is increasingly becoming a rentier society in which a substantial proportion of the balance of trade consists of the return on investments abroad by American corporations, rather than exports (Gillis, Perkins, Roemer, Snodgrass, 1983).

The modern industrial corporation is marked by large size. The distinctive character of the service sector is the small size of the the individual enterprises. In a post industrial society, the image of thousands of workers streaming from the smoking factories is obsolete. Furthermore, the character of the work will encourage if not mandate direct communications between individuals rather than interaction with a machine or system.

Technology is the foundation of the industrial society and accordingly, economic advantage is directly dependent upon the development and implementation of new technology.

This is realized by the planned employment of better methods



and organization to improve the utilization of capital for the development and implementation of this technology. A considerable amount of this planning goes on already in most major corporations which today operate in compliance with a combination of one-, five- and longer-year plans. However, most engineers, developers, industrialists and government officials tend to be single minded planners who plan for the resolution of an immediate short term problem. In addition, these planners often fail to distinguish between the technologies and the supporting systems in their planning processes (Bell, 1976).

The Corporation As A Social Institution

Although corporations are institutions for economizing, they also are ways of life for their members. The small town has virtually disapeared, the church has lost much of its emotional hold on people, and the tight bond between family members and family occupations (such as the farm or family business or the family occupation which was handed down) is gone. The business corporation, like a university or government agency with their attendent hierarchy and status systems, is now a lifetime experience for many of its members. In the postindustrial society, in addition to being concerned with producing and delivering its goods and services, organizations may need to concern themselves with becoming a satisfactory way of life for its members. This



would entail expending resources to meet the social needs of workers which potentially it cannot recoup in increased productivity (Shein, 1985).

The Public and The Private Interaction

The conventional models of microeconomics concentrate on the private profit-seeking centers. Yet, what is public, what is private, what is profit and, what is not-for-profit, is not an easy distinction. The aerospace industries are private, yet, the government purchases 94 percent of their output. Instead of retaining their revenues above costs as the profits, all profits above a negotiated sum are returned to the government. Under the arrangements in this particular situation, the government rather than the competitive market determines the profitabilty and survival of private profit-seeking organizations.

Both the current and future growth of the nonprofit sector as the employer of significant numbers of manpower bring into focus a whole array of organizations whose structure and form may need to differ to a considerable extent from the usual model of nonprofit government bureaucracy. Therefore, the emergence of new structural forms of nonbureacratic organizations may be one more item on the long agenda of new organizational issues in the post industrial society (Bell, 1976).



The Paradigm

According to criteria established by social scientists, the United States is now in the first stages of a post-industrial society. The United States has become the first to employ less than one half of the population in the production of food, clothing, housing, auto-mobiles, and other tangible goods. The character of the work has changed as well. Questions about whether or not all workers ultimately will be equal with equal pay and access, have begun to give way to questions about whether steady progress is being made so that until at least by occupation, every person is genteel. The criterion for genteel would be that heavy, excessive, and soul-destroying labor would vanish, and the worker would begin to value education and leisure (Bell, 1976).

Just as the business firm has been the key institution of the past 100 years because of its role in organizing people as well as for producing desired commodities, the university or some other form of "knowledge" institution will become the central institution for the postindustrial society because of its role as the new source of innovation and knowledge. Social scientists suggest that in the post-industrial society, production as well as business decisions will be greatly influenced by these institutional forcer. It is also suggested that:

"the growth and balancing of the economy will

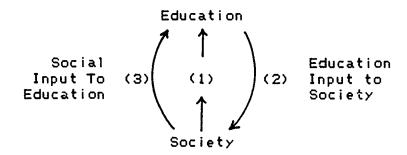


be based on the governments sponsorship of research and development, cost and benefit analysis because the nature of their consequences will be increasingly technical in character. The husbanding of talent and the spread of education and intellectual institutions will become a prime concern of the society" (Bell, 1976, p 344).

The complex relationship between education and society is a dialectic one. The contradiction lies in the fact that education is both an agent of change and in turn is changed by society. As indicated in Figure 5, education in the first instance is a product of society (1), but then acts on society and brings about change (2), which again acts on education (3).

There are two levels at which the dialectic process occurs. The first and more general relationship concerns the relationship of education and society as a whole. At the second level, the relationship is between education and the organization's economic, social, and political dimensions. The dialectic relationship between education and the economic, social, and political dimensions of an organization are illustrated in Figure 6.





<u>Figure 5.</u> Interrelationship between education and society.

According to Sagerland and Faha (1983), these relationships are in a constant state of change and thus not only the educational system, but the also the features of an organization are also changing.

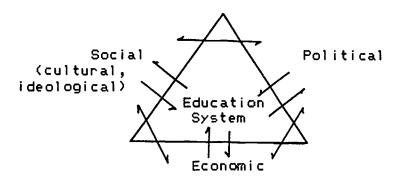


Figure 6. The relationship between education and organization's dimensions.

A Question Of Power

Decisions are a matter of power, and the crucial questions in society are who holds the power and how is that power held and executed. In the postindustrial society, the development and aquisition of technical expertise will



become the basis of power and reason for pursuing education. This is in contrast to traditional Western society, where the dominant system of power has been owning property and possessions. In the last twenty years we have seen the emergence of the pursuit of these technological specialties with education becoming the necessary route. Secondly, we have seen an emergance of political office based power with its attendent organization and machinery. Figure 7 summarizes these power structures in the emerging post industrial society.

Base of Power: Property Political Skill

Mode of Access: Inheritance Membership Education
Entrepreneur Co-optation
Ability

Social Unit: Family Group Individual Party

<u>Figure</u> 7. Emerging post industrial society power structures

The Charge To Vocational Education

Knowledge is a form of authority and education is the process of refining authoritative judgements. In the post industrial society the emphasis on vocationalism and specialization will increase. Appropriate schooling in the postindustrial society will become more important than ever (Bell, 1976).



We are experiencing the creation of new job roles and the obsolescence of current and traditional job roles as never before has happened in our society. Currently, an excess of 4 billion dollars per year is spent by profit driven organizations to provide their traditional workforce with specialized job skills and knowledge to keep up with this accelerated role specialization.

Those in vocational education may use the data from this and other studies to halp them decide how to and whether or not to enter into this arena as an institution to aid organizations in meeting this acceleration in the creation and obsolescence of specialized job roles. One of the key questions that should be address in their policy considerations is: whether or not in this process, the vocational education institution will becoming a leading advocate in implementing this accelerated specialization. If it does become a leading advocate, will this specialization be so much outside the context of generalizable knowledge that it will preclude individuals from developing their own values and norms or becoming socially knowledgeble? Will this specialization focus on the reinforcement of the organizations social values and norms?

What role vocational education will play in bringing the influence and control of government into organizations must be determinded. Will vocational education's primary



role to be that of extending the imposition of the state's rules, regulations, and guidelines into the enterprise as opposed to being totally responsive to the organization's determined needs for its services.

What role and position vocational education will take relative to reinforcing traditional organization planning and development strategies versus reinforcing the view of workers as people must be decided. In addition, what role vocational education has as a government agency versus the competitive market in influencing the profitabilty and survival of private profit seeking organizations must be determined.

Finally, vocational education must decide whether it has the capability to serve as a definitive institution of innovation and knowledge in a postindustrial society. In the post industrial society, the need for the development and aquisition of technical skills will become the base of education and the mode of access to power. Vocational education must decide whether or not it wants to take responsibility for influencing the rise of a politically influencial technocrat and specialized skill workers group in the emerging post industrialsociety.

The postindustrial society places unique burdens and opportunities before educational institutions. How educational institutions respond ultimately will reshape society and the educational institution itself.



Reference List

- Anderson, S.B., Ball, S. (1978). The profession and practice of program evaluation. San Fransisco:

 Jossey-Bass.
- Bell, D. (1976). The coming of post-industrial society.

 New York: Basics Books.
- Burke, W.W. (1982). <u>Organization development: Principles</u>
 and practices. Boston: Little, Brown.
- Gillis, M., Perkins, D.H., Roemer, M. & Snodgrass, D.R.

 (1983). <u>Economics of development</u>. London: W.W.

 Norton.
- Gentilman, R. (Ed.) (1983). <u>Academic programs and the world of work (ASTD Research Series Vol No. 10)</u>. Washington, DC: American Society for Training and Development.
- Hartshorn, G.R. (1983, February). National employment needs private/public sector cooperation. Paper presented at the hearings on reauthorization of the Vocational Education Act on behalf of Ford Motor Company, Washington, DC.
- Johns-Manville Corporation. (1976). <u>Definition of training</u>. Denver, CO: Corporate Training Department.
- Johnson, G. (In press). <u>Research methodology for economists</u>.

 New York: Prentice-Hall.
- Lusterman, S. (1977). Education in industry. New York:

 The New York Conference Board.



- Moss, J. (1985). <u>Vocational education and customized</u>
 <u>training</u>. Manuscript submitted for publication.
- O'Mara, J. (1983, February). Statements on behalf of

 American Society for Training and Development.

 Paper presented at the hearings on reauthorization of the vocational education act, Washington, D.C..
- Patton, M.Q (1982). <u>Practical ealuation</u>. Beverly Hills: CA: Sage.
- Patton, M.Q. (1981). <u>Creative evaluation</u>. Beverly Hills CA: Sage.
- Poplin, D. (1972). <u>Communities: A surveys of theories</u>

 and methods of research. New York: Macmillan.
- Raizen, S. & Rossi, P. (Eds.) (1981). Program evaluation in education: When?. how?. to what ends? Washington, DC:

 National Academy of Science.
- Saha, L.J. (1982). The sociology of aducational expansion.

 London: Sage.
- Saha, L.J. & Fagerland, I. (1983). <u>Education and national</u>
 <u>development</u>. Oxford: Pergamon Press
- Shein, E.H. (1985). <u>Organizational culture and leadership</u>.

 San Fransisco: Jossey Bass.
- Struening, E.L. & Guttentag, M. (Eds.) (1975). <u>Handbook of</u>
 evaluation research. Beverly Hills, CA: Sage.



- Schoonmaker, W. (1984). [An assessment and comparison of the training-related consulting needs of industry and the consulting interests of industrial education personnel]

 Unpublished raw data.
- Swanson, R.A. (1983). Equity and economics. <u>Performance and Instruction Journal</u>. 22(5), 2
- Swanson, R.A. & Murphy, B. (1982). The growing trend of industry and business. In K. Greenwood (Ed.) <u>1982 Year-book of the American Vocational Association</u>, (pp 105-112). Washington, DC: American Vocational Association.
- Staff. (1983, July 28). Growth in customized training.

 Manpower and Vocational Education Weekly.
- Tichy, N.M. (1982). Managing strategic change: The technical political and cultural dynamics. New York: Wiley.
- Travers, R.M.W. (1958). An introduction to educational research. New York: MacMillan.
- Veney, J.E. & Kaluzny A.D. (1984). <u>Evaluation and decision</u>

 making for health services programs. Englewood Cliffs

 NJ: Prentice Hall.
- Wells, F. (1983, February). National employment needs and private/public sector cooperation. Paper presented at the hearings on reauthorization of the Vocational Education Act on behalf of Mountain Bell Telephone Company, Washington, DC.



APPENDIX A

Abstract of the Study



Abstract of the Study

EDUCATION FOR WORK: AN INTEGRATION OF VOCATIONAL EDUCATION AND EMPLOYER SPONSORED TRAINING IN MINNESOTA (1)

Gary D. Geroy

Vocational education in the United States provides individuals with the necessary knowledge and skills to secure and perform jobs in the labor market. However, according to some studies, the knowledge and skills currently held and employed by the American workforce have been developed through employer—sponsored training. Additionally, studies have shown this need and trend for expansion of training in industry and business will continue. At the 1984 reathorization hearings of the Vocational Education Act, private sector spokespersons advocated a cooperative effort with public sector education to address this need.

The thesis that the goal of meeting the labor needs of industry and business is the same for vocational education and training has been accepted for this study. In order for Vocational Education to expand its role of providing employer specific training, it is likely that specific changes in its organization, staffing and facility utilization will be required. This will include the suitable preparation of professional personnel for new roles and the development and implementation of policies and practices to guide vocational education customized training activities. Additionally, to move from traditional vocational education to one which integrates customized employer-specific training capabilities, will require strategic management of organization, cultural, and political issues. Management literature suggests that these changes can be effectively and efficiently managed, but to do so, organizations must examine basic questions about their current nature and purposes as well as where they want to be. For vocational education in Minnesota to develop a guiding policy to achieve this change, it would be necessary to identify the critical issues which it must address.

The research problem is to identify the development and implementation issues surrounding the concept of integrating employer-specific education-for-work capabilities into Minnesota Vocational Education.

(1) Approved Thesis Topic For Education Doctoral Degree, University of Minnesota.



Š.

Specifically, the research is designed to answer the following question:

What are the policy issues which need to be addressed regarding: fiscal resources; organization and professional development; program implementation and evaluation, and program access?

This study is being conducted utilizing the evaluation research method developed by Michael Patton. The anticipated utility of the research outcome will be to aid in decision making regarding what should or should not be done (prescriptive knowledge).

The overall strategy to carry out this evaluation research is outlined as follows:

- Establish a small stakeholder group which represents constituencies with a stake in the research outcome.
- 2. In collaboration with stakeholder group, identify profile-specific individuals to be interviewed and conduct interview data gathering activities.
- 3. Synthesize and analyze data.
- 4. Present data interpretation to stakeholder group for feedback and critique.
- 5. Present final data.

The product of this research effort will be a document which identifies the concerns and issues which various interest groups suggest be given important consideration in any policy development process that addresses the topic under investigation.

The specific groups that will have stakeholders involved in the research and that will be accessed for data during the research effort are as follows: Department of Energy and Economic Development of the State of Minnesota, Department of Vocational and Technical Education at the University of Minnesota, Department of Vocactional Education (Postsecondary Programs) State of Minnesota, and strategic Human Resource Development planners and planners within the industry and business sector in the State of Minnesota.



APPENDIX B

Role of the Stakeholders



Role of the Stakeholders

As a stakeholder you will perform two primary functions. The first is to provide guidance for the development of the specific questions that will be used to gather data to ensure their relevance and significance to the group or organization asked to provide information. Your second role as a of stakeholder is to assist in the identification of key individuals from organizations or groups which should be the source from which relevant data is obtained and aid the researcher in gaining access to these key individuals.

As a member of the stakeholder group, you will be asked to commit to participate in two meetings during the period of December 1985 to April 1986. Due to the complexity of arranging the busy schedules of all the stakeholders to meet as a group, the researcher will arrange individual meetings with you in order to discuss relevant issues and share inputs from other stakeholders.

Additionally, you will be asked to repond to requests for review and written input within the time frames requested by the researcher. You can anticipate that the time requirements for the meetings will be approximately one to one and a half hours. The meeting schedule and agenda are approximated as follows:

1st meeting: Approximately December 10 to 15

- familiarization with the research, agenda and role of stakeholder
- preliminary identification of individuals to obtain data from
- preliminary discussion of research questions and focus for data gathering

Interim Meeting Stakeholder Activity:

- assist researcher in arranging necessary meetings with individuals identified to obtain data from.

2nd meeting: Approximately April 1 to 15

- stakeholder briefing of study outcome



APPENDIX C

Interview Preparation Package for Interviewees





Training and Development Research Center Department of Vocational and Technical Education College of Education 420 Vocational and Technical Education Building 1954 Buford Avenue St. Paul, Minnesota 55108

(612) 373-2487 or 376-5065

Date:		1986
Name of	Interview	N6 6
Address	etc.	

I thank you again for your time and willingness to participate in this study. As we agreed in our telephone conversation (date), I am forwarding to you for your review prior to our meeting, the following items; overview and purpose of the study, a summary and short discription of the areas that the discussion will be focusing upon, and a set of guideline to assist you in responding to the questions. I am also including some terms and definitions that may be useful to you for our discussion.

I look forward to our meeting on (date) from (time period). If I may be of any further assistance, please contact me.

Respectfully,

Gary D. Geroy Research Associate

Enclosures



Overview of Study

EDUCATION FOR WORK: AN INTEGRATION OF VOCATIONAL EDUCATION AND EMPLOYER SPONSORED TRAINING IN MINNESOTA (1)

Vocational education in the United States provides individuals with the necessary knowledge and skills to secure and perform jobs in the labor market. However, according to some studies, the knowledge and skills currently held and employed by the American workforce have been developed through employer—sponsored training. Additionally, studies have shown this need and trend for expansion of training in industry and business will continue. At the 1984 reathorization hearings of the Vocational Education Act in Washington DC, private sector representatives advocated a cooperative effort with public sector education to address this need.

In order for Minnesota Vocational Education to expand its role to provide employer specific training, specific changes in its organization, staffing and facility utilization will be required. This will include the suitable preparation of professional personnel for new roles and the development and implementation of policies and practices to guide vocational education customized training activities. To effectively and effeciently manage this change, Vocational Education must develop a guiding policy which is attendent to the concerns and needs of organizations and interest groups which potentially are impacted by these program and organization changes. Therefore, it is necessary to indentify what these groups and organizations feel are the critical issues which must be addressed by this policy to guide change.

The purpose of this research effort is to identify the development and implementation issues surrounding the concept of integrating employer-specific education-for-work capabilities into Minnesota Vocational Education.

Specifically, the research is designed to answer the following question:

- What are the policy issues which need to be addressed regarding: fiscal resources; organization and professional development; program implementation and evaluation, and program access.
- (1) Approved Doctoral Thesis in Vocational Education, University of Minnesota



This study is taking place over a three month period which began approximately 15 December, 1985. If data gathering can be completed by January 30, draft reports of findings will be available by mid-April.



Scope of Questions and Response Guidelines

Your role in this study will be to provide information that will help identify the issues Minnesota Vocational Education should consider as it develops policy and guidelines to develop and implement employer specific training capabilities and programs. Other organizations and groups that potentially will be impacted by this new program effort are also being asked to provide information to asssist with this research effort. This information gathering activity will take place through a one-time structured interview which will take less than two hours and which will focus on the general areas listed below

You will be asked to respond to questions during the interview related to these items. You will be asked to provide data which is reflective of how you, your organ-ization, or as others in organizations like yourself, would want to see things in order to maximize meeting organization or group needs, effectiveness and/or effeciency. The perspectives you provide should be your own; with your needs and concerns the priorities that shape your responses.

Areas to be Addressed During the Interview

Fiscal Issues:

From your perspective, we want to identify key issues regarding fiscal responsibilities for the program under consideration, the disbursement and use of funds generated by this program, and what legislated funding mechanisms and levels should be instituted to support this program effort.

Program Service Profile and Capabilities:
From your perspective, we want to identify key issues regarding the scope and capabilities of such a program.

Supporting Organization and Administrative Structures:

From your perspective, we want to identify key issues regarding how the postsecondary Vocational Education state organization should be structured to implement and manage this program.

Professional Development, Qualifications and Selection:
From your perspective, we want to identify key issues regarding what professional qualifications a person serving in the role of program implementor/manager in the AVTI should have. Additionally, what are the interest group's issues regarding ongoing professional development and the selection process for individuals for these positions.



- Evaluation of Program and Professional Activities
 From your perspective, we want to identify key issues
 regarding how and what type of evaluation activities
 should be employed and by whom.
- The VoEd Program Role in Larger Economic Strategies:
 From your perspective, we want to identify key issues regarding the role and relationships of the Vocational Education organization and this particular program in other agency activities which deal with economic development strategies and issues for the State of Minnesota.
- Equity and Access Considerations:

 From your perspective, we want to identify key issues regarding equity and access by organizations and individuals to this program.



Terms and Definitions

Human Resource Development (HRD)

- Activity and expenditure of resources directed toward improving the skills and knowledge of the work group; or which are directed toward having a work group adopt a set of values and behaviors that are desired by the sponsoring organization.

Training and Development

- This term has two components. The first, "Training," stands for employee training and the second, "Development," stands for organization development.
- Training is the presentation of controlled information and practice resulting in performance of criterion behavior by the learner in a manner which allows evaluation. The definition implies both effectiveness and efficiency.
- Development is the implementation of systematic and planned change within an organization to respond to identified needs.

Employer Specific Training

This refers to training which is designed, developed and implemented to meet the HRD needs of a specific employer or organization to the exclusion of all other organizations or employers. The purpose of the training is to develop skills and knowledge that are specific to a given organization and that are necessary for that organization to carry out its mission. Additionally, the training may be directed to only a selected portion of that organizations work group.



APPENDIX D

Structured Interview Questions



Structured Interview Outline and Questions

Fiscal Resources and Management

Interview Question: What do you perceive should be the key issues to be considered regarding fiscal responsibilities for the program under consideration with regard to:

- 1. legislative funding mechanisms and levels,
- 2. cost assessment,
- use and disbursement of funds generated by the program.

Program Service Profile and Capabilities

Interview Question: In your opinion, what should be the scope and focus of the AVTI training program with regards to:

- human resource development for various types of roles within the hierarchy of organizations, and
- types of activities specific to training programs within business and industry.

Supporting Organization and Adminstrative Structures

Interview Question: In order to best serve the user groups in the state, what do you perceive the administrative and management structure of this program to be with regards to:

- 1. overall strategy, service coordination and delivery,
- 2. its relationship to the current Adult Education Program?



Professional Development, Qualifications, and Selection
Interview Question: From your perspective, in order to have
the professional credibility that will encourage user groups
to solicit this program through the AVTI, what are the key
elements for consideration with regards to:

- 1. professional preparation and qualifications,
- 2. ongoing professional development,
- 3. selection of professionals.

Evaluation of Professional and Program Activities

Interview Question: From your perspective, who should be involved in what type of evaluation activities with regards to:

- individual appraisal systems for individuals managing or implementing this program,
- review and evaluation of this program's effectiveness.

The VoEd's Program Role in Larger Economic Strategies

Interview Question: From your perspective, what strategic vocational education training program working linkages would improve program efficiency and ensure maximum program impact within the state of Minnesota with regards to:

- 1. Key organizations in the linkages,
- 2. format of the linkages.



Equity and Access Considerations

Interview Question: From your perspective, what types of considerations do you see necessary with regards to:

- 1. incentives and/or subsidies for oganizations to want to take advantages of this program,
- use of public funds to underwrite portions of training costs for individual organizations.



APPENDIX E

Information Sheet for Stakeholders



Stakeholder Information Sheet

The following information is designed to aid you in your discussions with individuals with whom you may be discussing this research effort. It provides four major elements of information. The first is an abreviated overview of the study which will aid you in your discussions with individuals with whom you are arranging interviews for the researcher. The second element is an outline of the areas that will be discussed during these data-gathering interviews. The third element is a summary of terms and definitions that you may find helpful in your discussions during your involvment in the study. The fourth element is an abreviated vita of the researcher.

Please note that this information is for your use, so feel free to make notes and mark it up as you need. The individuals who agree to participate in this study will receive their own set in a preinterview package.



I The Study

EDUCATION FOR WORK: AN INTEGRATION OF VOCATIONAL EDUCATION AND EMPLOYER-SPONSORED TRAINING IN MINNESOTA (1)

Vocational education in the United States provides individuals with the necessary knowledge and skills to secure and perform jobs in the labor market. However, according to some studies, the knowledge and skills currently held and employed by the American workforce have been developed through employer-sponsored training. Additionally, studies have shown this need and trend for expansion of training in industry and business will continue. At the 1984 reathorization hearings of the Vocational Education Act in Washington DC, private sector representatives advocated a cooperative effort with public sector education to address this need.

In order for Minnesota Vocational Education to expand its role to provide employer-specific training, specific changes in its organization, staffing and facility utilization will be required. This will include the suitable preparation of professional personnel for new roles and the development and implementation of policies and practices to guide vocational education customized training activities. To effectively and effeciently manage this change, Vocational Education must develop a guiding policy which is attendent to the concerns and needs of organizations and interest groups which potentially are impacted by these program and organization changes. Therefore, it is necessary to indentify what these groups and organizations feel are the critical issues which must be addressed by this policy to guide change.

The purpose of this research effort is to identify the development and implementation issues surrounding the concept of integrating employer-specific education-for-work capabilities into Minnesota Vocational Education.

Specifically, the research is designed to answer the following question:

- 1. What are the policy issues which need to be addressed regarding; fiscal resources; organization and professional development; and program implementation and evaluation, and program access?
- (1) Approved Doctoral Thesis in Vocational Education, University of Minnesota



This study is taking place over a three month period which began approximately 15 December, 1985. If data gathering can be completed by January 30, draft reports of findings will be available by mid-April.



II Scope of Questions and Response Guidelines

Your (interviewee) role in this study will be to provide information that will help identify the issues Minnesota Vocational Education should consider as it develops policy and guidelines to develop and implement employer specific training capabilities and programs. Other organizations and groups that potentially will be impacted by this new program effort are also being asked to provide information to asssist with this research effort. This information gathering activity will take place through a one—time structured interview which will take less than two hours and which will focus on the general areas listed below.

You will be asked to respond to questions during the interview related to these items. You will be asked to provide data which is relective of how you, your organization, or as you suggest others in organizations like yourself, would want to see things in order to maximize meeting organization or group needs, effectiveness and/or effeciency. The perspectives you provide should be your own; with your needs and concerns the priorities that shape your responses.

Areas to be Addressed During the Interview

Fiscal Resources and Management:

From your perspective, we want to identify key issues regarding fiscal responsibilities for the program under consideration, the disbursement and use of funds generated by this program, and what legislated funding mechanisms and levels should be instituted to support this program effort.

Program Service Profile and Capabilities:

From your perspective, we want to identify key issues regarding the scope and capabilities of such a program.

Supporting Organization and Administrative Structures:

From your perspective, we want to identify key issues regarding how the postsecondary Vocational Education state organization should be structured to implement and manage this program.



148/ 1

Professional Development, Qualifications, and Selection:

From your perspective, we want to identify key issues regarding what professional qualifications a person serving in the role of program implementor/manager in the AVTI should have. Additionally, what are the interest group's issues regarding on-going professional development and the selection process for individuals for these positions.

Evaluation of Program and Professional Activities:

From your perspective, we want to identify key issues regarding how and what type of evaluation activities should be employed and by whom.

The VoEd Program Role in Larger Economic Strategies:

From your perspective, we want to identify key issues regarding the role and relationships of the Vocational Education organization and this particular program in other agency activities which deal with economic development strategies and issues for the State of Minnesota.

Equity and Access Considerations:

From your perspective, we want to identify key issues regarding equity and access by organizations and individuals to this program.



III Terms and Definitions

Human Resource Development (HRD)

- Activity and expenditure of resources directed toward improving the skills and knowledge of the work group, or which are directed toward having a work group adopt a set of values and behaviors that are desired by the sponsoring organization.

Training and Development

- This term has two components. The first "Training," stands for employee training and the second, "Development," stands for organization development.
- Training is the presentation of controlled information and practice resulting in performance of criterion behavior by the learner in a manner which allows evaluation. The definition implies both effectiveness and efficiency.
- Development is the implementation of systematic and planned change within an organization to respond to identified needs.

Employer-Specific Training

- This refers to training which is designed, developed and implemented to meet the HRD needs of a specific employer or organization to the exclusion of all other organizations or employers. The purpose of the training is to develop skills and knowledge that are specific to a given organization and that are necessary for that organization to carry out its mission. Additionally, the training may be directed to only a selected portion of that organizations work group.





IV About The Researcher

Gary D. Geroy 879 Monterey Drive Shoreview MN 55126 Office 373-2487 Home 484-3874

Gary has been at the University of Minnesota since January of 1983 when he began his Masters of Education degree majoring in training and development in business and industry. He completed his Masters degree in June of 1984 and began his doctoral studies in September of 1984, majoring in education for work and economic development. Gary is planning to complete his doctoral degree by May of 1986.

This study is being carried out in support of his doctoral thesis and in response to a desire by the Training and Development Research Center at the University of Minnesota to examine this particular issue.

Prior to returning to school to do advanced degree studies, Gary spent several years working in a variety of public-sector and private-sector organizations. His responsibilities included human resource development, administrative, financial and programatic management.

Since returning to school, Gary has presented papers at a variety of national and international conferences and has published several papers. Most of the presentations and publications have dealt with cost benefit issues related to training and development and economics of education.

In May of 1985, Gary received the National Outstanding Student Research Award from the National Society For Performance and Instruction for his Masters thesis and research related to human resource development. Gary has been invited to give a presentation at the 1985 international conference on Economics of Education at Dijon France.

He has worked with several local organizations including Onan Corporation, Pyramid Mental Health Center, Proex Corporation, Caldwell Associates and Super Valu Inc. on a variety of human resource development projects. In addition, Gary is involved with several programs and organizations at the University of Minnesota including the International Education Committee, The Humphrey Institute North-South Fellowship Program, and the Global Education Center.

