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ABSTRACT

This document recapitulates the seventh in a continuing series of annual, nationwide vocational education dissemination conferences. As a record of conference activities and a guide to available resources, information, and programs across the country, this recap is intended to serve both conference participants and a general audience of vocational educators. Following the executive summary and introduction is an overview of all conference events that provides the title of each topical session and the names of presenters. Sessions reported later in the conference agenda are indicated. Annotations of the 46 topical sessions (presentations, workshops, and seminars) are then presented. The thematic emphasis of the sessions is on a diversity of tools, techniques, and exemplars for helping vocational educators achieve programmatic excellence in an information age, including databases and retrieval systems; networks, resource centers, and program improvement organizations; microcomputer courseware; and techniques to develop exemplary program improvement products. Annotations follow the sequence of the conference agenda; repeated sessions are indicated. Many session annotations make reference to particular information pieces, handouts, and exhibit materials, which are presented sequentially in appendix A. Appendix B is a list of all conference participants and presenters and their addresses and telephone numbers. (YLB)

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- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Providing information for national planning and policy
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

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A RECAP OF THE SEVENTH NATIONWIDE VOCATIONAL EDUCATION DISSEMINATION CONFERENCE

EXCELLENCE FOR THE INFORMATION AGE

NOVEMBER 13-15, 1984

Compiled by

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Shelley Grieve
Katherine E. Shumate

The National Center for Research in Vocational Education
The Ohio State University
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CONTENTS

FOREWORD

A Recap of The Seventh Nationwide Vocational Education Dissemination Conference reviews the proceedings of that convening of vocational education disseminators, linkers, administrators, researchers, resource staffs, and other change agents at the National Center for Research in Vocational Education, Columbus, Ohio, on November 13-15, 1984. The National Center extends appeciation for the excellent response to the call for presenters issued several months before the conference, and for the support and participation of the many agencies and individuals who sponsored and prepared 46 individual session offerings, and who sponsored the participation of conferees-at-large. Appreciation also is extended to the National Research Coordinating Unit Association and the State Research Coordinating Units as well as The National Network for Curriculum Coordination and the regional Curriculum Coordination Centers for their planning advice, support and participation.

The National Center for Res ·ch in Vocational Education gratefully acknowledges the efforts of staff members Dr. Norman M. Singer, Conference Director, and Scot Krause, Program Coordinator, as well as the participation of keynote speaker Dr. Ronald Havelock of George Mason University, Fairfax, Virginia.

This recap was compiled by Norman M. Singer, Shelley Grieve, and Katherine M. Shumate, the last of whom also served as conference secretary. Lorna Calvert typed the manuscript. Editorial assistance was provided by Judy Balogh.

Robert E. Taylor
Executive Director
National Center for Research
in Vocational Education

EXECUTIVE SUMMARY

This document recapitulates the seventh in a continuing series of annual, nationwide vocational education dissemination conferences. Like the earlier conferences in this series, this conference addressed the persistent problem of affording vocational educators, disseminators and program improvement personnel nationwide with a dynamic forum for accessing and exchanging vital information and with stimulii for the improvement of dissemination and the subsequent improvement of vocational education programs. The thematic emphasis of the conference sessions summarized in this document is on a diversity of tools, techniques and exemplars for helping vocational educators achieve programmatic excellence in an information age -- in a time when vocational education and society-at-large are confronted daily with fast-paced changes and the resultant need to improve how we cope with those changes.

The conference sessions reported in the recapitulation are concerned with a variety of issues and questions which vocational education at large should contemplate as they work to promote vocational education excellence in this information age. These include:

- What databases and retrieval systems are available for accessing latest information?
- What products are available to help address priority concerns among states and local education agencies?
- What networks, resource centers and program improvement organizations operate to help the vocational educator?
- What theoretical and conceptual problems need the attention of the vocational education change agent or linker?
- What kinds of programs and practices command the attention of the postsecondary vocational educator?

- What new instructional and manufacturing technologies should be familiar to the progressive vocational educator?

- How can a vocational education organization assess its readiness for change (e.g. for individualization and competency-based instruction)?

- What makes vocational curriculum "disseminable?"

- How should one identify, evaluate and integrate microcomputer courseware in their vocational programs?

- How can vocational assessment be adapted to the constraints and needs of the in-school setting?

- What are some of the untapped dissemination opportunities vocational educators can find in Corrections education?

- What should the vocational education change agent know about current trends and issues in adult education?

- How might the vocational educator develop exemplary program improvement products that command attention and prove to be "disseminable?"

Information, answers, and other kinds of educational responses to these issue-laden questions were delivered throughout The Seventh Nationwide Vocational Education Dissemination Conference in the various individual sessions and workshops. These are summarized in the "Recap" document, and selected resources, hand-out material, and exhibit items are referenced in the descriptions and presented in appendix A. Contact information about both the presenters and conferees-at-large is presented in appendix B.

The Seventh Nationwide Vocational Education Dissemination Conference brought to bear 46 different sessions (presentations, workshops, or seminars) which offered the conference participants a diversity of information to help them and their home organizations address the questions articulated above. This document summarizes, session-by-session, that array of information.

The Seventh Nationwide Vocational Education Dissemination Conference and this recap document demonstrates that the National Center for Research in Vocational Edcuation, many state vocational education agencies, local secondary and postsecondary institutions, and various national and regional networks and clearinghouses are facing squarely the continuing problems of updating vocational education research, practice and evaluation to meet the information age challenges. They are developing databases, libraries and resource centers, instructional and reference products, and new programs and practices in response to those challenges. Concurrently, they are contemplating actively the range of theoretical, philosophical and conceptual or developmental issues which must be addressed in the quest for vocational education excellence. Examples and details regarding this important progress are found among the summaries and appendicized materials in this document. Finally, the list of presenters and participants provided in appendix B demonstrates that conferees from 27 states came to participate in the conference on their own volition or at the discretion of their sponsoring agencies. This level of interested participation suggests that the need to afford vocational educators, disseminators and program improvement personnel with a dynamic forum information access and exchange is, indeed, real and widely recognized. On that basis, the National Center for Research in Vocational Education has recommended to the Office of Vocational and Adult Education, U. S. Department of Education, that The Eighth Nationwide Vocational Education Dissemination Conference be conducted similarly in 1985, addressing the theme, "Marketing Vocational Education through Products and Services: Strategies for Program Effectiveness."

INTRODUCTION: HOW TO USE THIS RECAP

As a record of conference activities and a guide to available resources, information and programs across the country, this recap is intended to serve both conference participants and a general audience of vocational educators. The compilers of this document suggest that it be used in several ways:

1. Peruse it to scan for information and resources you may wish to explore further through telephone, mail, or ADVOCNET contact with various presenters.

2. Review it more closely to refresh your recall about the conference sessions you attended, or to learn more about those sessions you did not choose at the conference. Extend the value of your participation!

3. Make copies of pertinent descriptions in this recap and share them with your staff, colleagues and professional acquintances. Share the wealth with them!

4. Keep this recap handy as a useful office reference to prompt recall and further contact with presenters who dealt with topics related to your needs and interests throughout the year. Get in touch with presenters!

5. Use this recap to stimulate your own creative thinking about possible presentations you or your organization may wish to make at The Eighth Nationwide Vocational Education Dissemination Conference scheduled for October 15-17, 1985, at the National Center.

Immediately following this introduction, you will find a overview of all of the conference events. This overview provides at a glance the title of each topical session and the names of the presenters. The overview also includes indications of sessions repeated later in the conference agenda.

Following the overview agenda chart, annotations of each of the 46 different topical sessions (presentations, workshops and seminars) are presented. These annotations follow the sequence of the conference agenda. Repeated sessions are also indicated. Many of the session annotations make reference to particular information pieces, hand-outs,

and exhibit materials which are presented sequentially in appendix A. Individual session annotations specify reference page numbers in appendix A.

The final section of this recap presents an updated list of all conference participants and presenters. The list includes their names and addresses as well as telephone numbers for those who wished for them to be included. National Center participants and presenters are listed together following the list of field-based participants and presenters. All National Center staff members can be reached by mail at the National Center, by telephone (toll-free) at 1-800-848-4815 (from the Continental USA outside of Ohio) or 1-614-486-3655. National Center staff also can be addressed via the ADVOCNET electronic mail system at the following electronic address: AVO 0007 (in care of the Program Information Office).

If you wish to offer suggestions of topical sessions for The Eighth Nationwide Vocational Education Dissemination Conference on the theme, "Marketing Vocational Education through Products and Services: Strategies for Program Effectiveness," contact Dr. Norman M. Singer to discuss your ideas. It's not too early to plan for your 1985 conference presentation. In any case, mark your calendar now to participate in The Eighth Nationwide Vocational Education Dissemination Conference in Columbus, Ohio, on October 15-17, 1985. The National Center staff looks forward to seeing you here!

OVERVIEW OF CONFERENCE SESSIONS

8:00 - 9:00 a.m.	Conference Registration and Refreshments -- Room 1C, 1960 Building			
9:00 - 10:25 a.m. Opening General Session Chair-person: *Norm Singer*	elcome and Staff ntroductions *Norm Singer* *Conference Director*	Opening Comments and Introduction of Keynote Speaker *Dr. Robert E. Taylor* *Executive Director* *National Center*	Keynote Address: The Linkage Challenge: Improving the Practice of Vocational Education *Dr. Ronald Havelock* *George Mason University* *Washington, D.C.*	Orientation to the Conference: Products and Services *Cathy Ashmore* *National Center* Orientation to Agenda *Scot Krause* *Program Coordinator*
10:25 - 10:45 a.m.	Session and Refreshment Break -- Room 1A, 1960 Building			
10:40 - 11:30 a.m. Session 1	Community College: Youth's Link to Job Markets *Sandra Arky* *Carol Pyles* *Houston Community College System* Room: 1A	Organizational Health: A Prerequisite for Meaningful Change *Marvin Fairman* *University of Arkansas* *(REPEATED, SESSION 8)* Room: 1B	Using Interactive Video Technology to Teach Technology *Ann V. Brown* *IVES Incorporated* *(REPEATED, SESSION 7)* Room: 1C	All Roads Lead to "ROME" Resource Organizations and Meetings for Educators--An All-Purpose Database *Ruth Gordon* *National Center* Room: North Auditorium
11:30 a.m.	Lunch and "Table Talk with Division Associate Directors at National Center -- Room 1A Divisions: Development: Harry Drier; Evaluation & Policy: Mac McCaslin; Information Systems: Juliet Miller; International: Joel Magisos; Personnel Development & Field Services: Lucy Thrane; Research: John Bishop			
12:30 - 1:20 p.m. Session 2 Chair-person: *Lucy Thrane*	Ohio Highlights *Sonia Price* *Ohio State Department of Education* *Others: Brenda Hallensen, Clifford Migat, Dale Baughman* Room: 1A	The Arizona Center for Vocational Education: "A Western Approach" *Donald A. Parsons* *Arizona Center* Room: 1B	Tired of Telephone Ping Pong? Try Electronic Mail *Yvonne Bergland* *Wes Budke* *National Center* *(REPEATED, SESSION 12)* Room: 1C	The Future Environment for Vocational Education *Morgan Lewis* *Jeannette Fraser* *National Center* Room: North Auditorium
1:30 - 2:20 p.m. Session 3	Ohio Highlights (Continued) Room: 1A	Utilizing R & D Products in Strategic Planning and Human Development *Warren Groff* *North Central Technical College (Ohio)* Room: 1B	Using Labor Market and Enrollment Data for Secondary-Post-secondary Articulation *Meg Murphy* *North Carolina Department of Public Instruction* *(REPEATED, SESSION 4)* Room: 1C	NNCCVTE--A Network That Works! *Rebecca S. Douglass* *Barbara Luckner-Loveless* *National Network for Curriculum Coordination in Vocational/Technical Education* Room: North Auditorium
2:20 - 2:40 p.m.	Refreshment Break -- Room 1A, 1960 Building			
2:40 - 3:30 p.m. Session 4	Time on Task: A Tool to Improve Vocational Education *Ida Halasz* *National Center* Room: 1A	Robotics--Flexible Manufacturing in Education *Arthur M. Peters* *TII Robotic Systems, Incorporated (Ill.)* *(REPEATED, SESSION 5)* Room: 1B	Using Labor Market and Enrollment Data for Secondary-Post-secondary Articulation *Meg Murphy* *(REPEATED FROM SESSION 3)* Room: 1C	Entrepreneurship Education--A Change Process--Vocational Education the Vehicle *Novella Ross* *National Center* Room: North Auditorium
3:40 - 4:30 p.m. Session 5	Postsecondary Vocational/Technical Advising & Counseling *Carol Pyles* *Sandra Arky* *Houston Community College System* Room: 1A	Robotics--Flexible Manufacturing in Education *Arthur M. Peters* *(REPEATED FROM SESSION 4)* Room: 1B	A Search In Time... Saves! *Judy Wagner* *National Center* Room: 1C	The Special Education Software Center...And You *Phyllis Baker* *LINC Resources, Incorporated (Ohio)* Room: North Auditorium
4:30 p.m.	Adjournment Ho Host Reception: Voyager Room, University Hilton Hotel -- Conferees, their guests, and National Center staff-at-large -- Entertainment: Haresuite			

8:00 - 8:30 a.m. Chair-person: *Mac McCaslin*	Refreshments and Announcements -- Room 1A, 1960 Building			
8:30 - 9:20 a.m. Session 6	We All Have Questions--We All Have Answers *Jan Novak* *The Vocational Studies Center (Wisconsin)* Room: 1A	Job Development on A Shoestring *Carol Spencer* *Wilberforce University (Ohio)* Room: 1B	Vocational Administrator's Use of Microcomputers *C. Todd Strohmenger* *Appalachia Educational Laboratory, Inc. (West Virginia)* Room: 1C	Assessing Progress Toward Individualization *Richard J. Smith* *Texas State Technical Institute* Room: North Auditorium
9:30 - 10:20 a.m. Session 7	An Alternative Approach to Vocational Education Curriculum *Joanna Kister* *Ohio State Department of Education* Room: 1A	Adapting Vocational Assessment to the Constraints and Needs of the In-School Setting: A Problem-Solving Strategy *Delores H. Nelson* *Debra G. Hammer* *Kentucky Department of Education* *(REPEATED, SESSION 14)* Room: 1B	Using Interactive Video Technology to Teach Technology *Ann V. Brown* *(REPEATED FROM SESSION 1)* Room: 1C	Bridging the Gap Between Research and Practice: Building a Network for Disseminating Research on Youth Employability *Margo Vreeburg Izzo* *National Center* Room: North Auditorium
10:20 - 10:40 a.m.	Refreshment Break -- Room 1A, 1960 Building			
10:40 - 11:30 a.m. Session 8	Is Your Curriculum Disseminable? *Ruth Volz Patton* *East Central Network* *Illinois Vocational Curriculum Center* Room: 1A	Dissemination/Diffusion of a Food Production/Food Service Curriculum *Beth Packard* *Arizona Center for Vocational Education* Room: 1B	Identifying, Evaluating, and Integrating Microcomputer Courseware for Vocational/Technical Education *Shirley Chase* *National Center* *(REPEATED, SESSION 14)* Room: 1C	Organizational Health: A Prerequisite for Meaningful Change *Marvin Fairman* *(REPEATED FROM SESSION 1)* Room: North Auditorium
11:30 a.m.	Lunch and Recognition Awards: Selected Products -- Room 1A, 1960 Building *Dr. Robert E. Taylor* *Executive Director* *National Center*			
12:30 - 2:20 p.m. Session 9 Chair-person: *Jay Smink*	Roundtable Discussion of Selected Products (Concurrent Sessions) Group 1 (12:30-1:20 p.m. -- Each Roundtable repected twice) 1. Career Redirections for Aaults, *Marilyn Clark, Northwest Regional Education Laboratory (Oregon)* 2. Education for Employment--Planning for Economic Development: A Strategic Approach, *James Leach, University of Illinois* 3. Making It Work--In-Service Training Program for Vocational Education, *Elaine Cadigan, Massachusetts State Department of Education* 4. Target: Employment--A Resource Guide to Job-Seeking and Job-retention Materials, *James Pershing, Vocational Education Services, Indiana University* Room: 1A -- Numbers 1, 3 & 4; Room 1B -- Number 2 Group 2 (1:30 - 2:20 p.m. - Each Roundtable repeated twice) 5. Communications Skills I & II and A New Look At An Old Skill: Reading in the Vocational Classroom, *Tom Hindes, Instructional Materials Laboratory, Ohio State University* 6. Leadership Development Through Planned Instruction in Vocational Education, *Joseph Cvancara, Department of Agriculture and Home Economics, Washington State University* 7. Presentin. Cooperative Education--A Guide for Providing Information about Cooperative Education and Recruiting Work Stations, *Seymour Lesh, National Child Labor Committe (NY)* Room: 1A -- Numbers 5 & 6; Room: 1B - Number 7			Tailor Made Strategies of Dissemination *H.S. Bhola* *Indiana University* *Peter Seidman* *Illinois State Board of Education* *Linda Lotto* *National Center* Room: North Auditorium Tailor Made Strategies of Dissemination (Session Continues) Room: North Auditorium

Wednesday -- November 14, 1984 (continued)

2:25 - 2:40 p.m.	Refreshment Break -- Room 1A, 1960 Building			
2:40 - 3:30 p.m. Session 10	Development of an Exemplary Product *Elaine Cadigan* *Massachusetts State Department of Education* Room: 1A	Competency-Based Career Guidance Modules *Bob Campbell* *National Center* Room: 1B	VOSCAN: An Electronic Database for Vocational Education *Jeff Lake* *East Central Network, Illinois Vocational Curriculum Center* Room: 1C	"Words Worth Processing" *Ross Thomson* *New York State Department of Education* Room: North Auditorium
3:40 - 4:30 p.m. Session 11	Trends and Issues in Adult Education *Susan Imel* *National Center* *Kathleen Theil* *Lakewood Public Schools (Ohio)* Room: 1A	Competency-Based Vocational Education in Massachusetts--A School-Based Statewide Model *Shirley McLean* *Sheila Herbert* *Massachusetts State Department of Ed.* **(REPEATED SESSION 12)** Room: 1B	Electronic Access to a State Curriculum Resource Center *Tim MacLaughlin* *Gloria Kielbaso* *Michigan Vocational Education Resource Center* Room: 1C	Building Local Consensus *Joe E. Shively* *Appalachia Educational Laboratory (West Virginia)* Room: North Auditorium
4:30 p.m.	Adjournment			

	Thursday -- November 15, 1984			
8:00 - 8:30 a.m. Chairperson: *Judy Samuelson*	Refreshments and Announcements -- Room 1A, 1960 Building			
8:30 - 9:20 a.m. Session 12	Competency-Based Vocational Education in Massachusetts--A School-Based Statewide Model *Shirley McLean* *Sheila Herbert* *(REPEATED FROM SESSION 11)* Room: 1A	ACTIONCODE--The Interactive Videodisc Training System *Chip Harris* *Pat Anderson* *National Education Corporation (Connecticut)* Room: 1B	Tired of Telephone Ping Pong? Try Electronic Mail *Yvonne Bergland* *Wes Budke* *National Center* *(REPEATED FROM SESSION 2)* Room: 1C	
9:30 - 10:20 a.m. Session 13	Gaining Acceptance as an Award Winning Program *Rebecca Douglass* *East Central Network* *Robert Scott* *Office of Vocational and Adult Education (Washington, D.C.)* Room: 1A	Corrections Education Untapped Dissemination Opportunities *Ida Halasz* *National Center* Room: 1B	Managing Databases with Microcomputers *Ruth Gordon* *Naomi Jacobs* *Sandra Kerka* *National Center* Room: 1C	
10:20 - 10:40 a.m.	Refreshment Break -- Room 1A, 1960 Building			
10:40 - 11:30 a.m. Session 14	Adult Vocational Development *Walter Adams* *Appalachia Educational Laboratory* Room: 1A	Adapting Vocational Assessment to the Constraints and Needs of the In-School Setting: A Problem-Solving Strategy *Delores H. Nelson* *Debra G. Hammer* *(REPEATED FROM SESSION 7)* Room: 1B	Identifying, Evaluating, and Integrating Microcomputer Courseware for Vocational/Technical Education *Shirley Chase* *National Center* *(REPEATED FROM SESSION 8)* Room: 1C	
11:30 a.m.	Conference Wrap-Up, Evaluation and Final Adjournment -- Room 1A, 1960 Building			

ANNOTATIONS OF THE CONFERENCE SESSIONS

THE SEVENTH NATIONWIDE VOCATIONAL EDUCATION DISSEMINATION CONFERENCE

"Excellence for the Information Age"

Dr. Norman M. Singer, Conference Director
Scot Krause, Program Coordinator for
The National Academy for Vocational Education

TUESDAY, November 13, 1984

AM Chairperson: Norm Singer

8:15 AM CONFERENCE REGISTRATION

Both pre-registered conferees and new registrants convened at the National Center where they received conference materials packets and had an opportunity for informal greetings. Morning refreshments were provided.

9:00 AM OPENING GENERAL SESSION
Room 1A, 1960 Building

Welcome and Staff Introductions

Norm Singer, Conference Director
The National Center for Research in Vocational Education

OPENING COMMENTS

Dr. Robert E. Taylor
Executive Director
The National Center for Research in Vocational Education

Dr. Taylor opened the conference by describing the many and diverse approaches taken by National Center staff over the years to promote the best spread, exchange, choice and use of vocational education program improvement information and resources nationwide. The annual dissemination conferences represent but one technique available to vocational educators to stimulate and sustain an energetic two-way flow of communication among change agents.

9:15 AM KEYNOTE ADDRESS: THE LINKAGE CHALLENGE: IMPROVING THE PRACTICE OF VOCATIONAL EDUCATION

Dr. Ronald Havelock
George Mason University

Dr. Havelock introduced the keynote address by defining the role of vocational education as one of matching opportunities and the changing needs of society with the skills and capacities and inclinations of succeeding generations. To expand this point, he called upon the theory of linkage and its underlying assumptions and portrayed the resource-user interfaces he sees in vocational education. Emphasis was given to the importance of understanding the user as a social system including the peer network and the formal organization. It was explained that understanding the need spectrum and the resource system also is vital to realizing effectively the theory of linkage and defining appropriately one's role as a change agent. The change agent role may be defined as that of a knowledge carrier or need message carrier, a knowledge broker, the general information service provider, the transformation specialist, the linkage process specialist, the application or utilization specialist, the change process specialist, or as the change catalyst.

Dr. Havelock further explored issues in change agent role definition and placement, and offered ten principles to guide any linkage effort. The principles include homophily, empathy, linkage, proximity, structuring, capacity, openness, reward, energy and synergy.

10:15 AM ORIENTATION TO THE CONFERENCE

Products and Services of the National Center

Cathy Ashmore, Field Services
The National Center for Research in Vocational Education

Orientation to Agenda

Scot Krause, Program Coordinator
The National Center for Research in Vocational Education

10:25 AM REFRESHMENT BREAK
Room 1A, 1960 Building

10:40 AM CONCURRENT SESSION #1. (Participants chose one workshop.)

- COMMUNITY COLLEGE: YOUTH'S LINK TO JOB MARKETS
  Room: 1A, 1960 Building
  Sandra Arky
  Carol Pyles
  Houston Community College System (TX)

  Community colleges are links in training between youth and the job market. Close cooperation between community colleges and regional industry is one of America's strengths. Working in small groups, participants from various geographic regions identified high-tech requirements for specific industries. Discussion revealed a need for locally-based program planning rather than following nationwide trends. The need for business and industry to play an active role in such planning was also stressed.

- ORGANIZATIONAL HEALTH: A PREREQUISITE FOR MEANINGFUL CHANGE
  Room: 1B, 1960 Building

  Marvin Fairman, Professor of Educational Administration, University of Arkansas, and President of Organizational Health: Diagnostic & Development Corp.

  Have you wondered why an "excellent new program" is implemented successfully in one organization and fails in what appears to be a similar organization? Are you interested in learning about a diagnostic tool and strategies for enhancing the success of new innovations? Participants in this session expressed a desire for their State leaders to become aware of this innovative and pragmatic approach for helping organization leaders and members accept and internalize new programs and concepts. Figures illustrating "Sequential Steps for Improving Good Focus"and "Factors Contributing to Increased Organizational Productivity: A Conceptual View" are found in appendix A, pp. 29-30.

- USING INTERACTIVE VIDEO TECHNOLOGY TO TEACH TECHNOLOGY
  Room: 1C, 1960 Building

  Ann V. Brown
  IVES, Inc. (MI)
  (Computer-based Training)

This session demonstrated the power and flexibility of using interactive video computer-based training to teach vocational subjects. There was a demonstration of an interactive video electronics training system that combined both theory and "hands on" skill modules. This is an individualized, competency-based, open-entry/open-exit system that has been used to train individuals both in industry and in the classroom. There was also a demonstration of how interactive materials are created using existing videotape and an authoring system to develop specific needs courseware. (This is repeated during session #7.)

- ALL ROADS LEAD TO "ROME". . . RESOURCE ORGANIZATIONS AND MEETINGS FOR EDUCATORS, AN ALL-PURPOSE DATABASE
  Room: North Auditorium, 1900 Building

  Ruth Gordon
  The National Center for Research in Vocational Education

  The ROME database lists organizations, professional meetings, projects, and products that cover all areas of education. This overview of ROME emphasized features that can contribute to dissemination efforts such as publicizing workshops and conferences and identifying organizations as target audiences or collaborators. A description of ROME and an invitation to contribute to the RRS meetings exchange are found in appendix A, pp. 31-33.

11:30 AM LUNCHEON AND "TABLE TALK" WITH NATIONAL CENTER DIVISION ASSOCIATE DIRECTORS
Room: 1A, 1960 Building

John Bishop, Research Division
Harry Drier, Development Division
Joel Magisos, International Division
Mac McCaslin, Evaluation and Policy Division
Juliete Miller, Information Systems Division
Lucille C. Thrane, Personnel Development and Field Services Division

PM Chairperson: Lucy Thrane

12:30 PM CONCURRENT SESSION #2. (Participants chose one workshop.)

- OHIO HIGHLIGHTS: ACTION AGENDA FOR THE CHANGING WORKPLACE
  (This is the first part of a double length session.)
  Room: 1A, 1960 Building

Sonia M. Price
Ohio Department of Education

Brenda Hallensen
Clifford Migal
Dale Baughman

It seems apparent that every State needs a new agenda for action. Ohio has one! Participants at this session heard state and local vocational educators discuss major initiatives aimed specifically at adapting vocational education to the changing workplace. A great deal of interest was shown in increased basic skills for vocational education students, and questions were posed regarding teaching certification for business persons who "trade places" with certified teachers in the classroom. (This is continued in session #3.)

- THE ARIZONA CENTER FOR VOCATIONAL EDUCATION: "A WESTERN APPROACH"
  Room: 1B, 1960 Building

  Don Parsons
  The Arizona Center for Vocational Education

  This presentation briefly discussed starting a new vocational education center, including discussion about State and university commitment, resources, goals, and structure. Information was provided regarding development of the Arizona Center, its accomplishments, and potential impact on neighboring States.

- TIRED OF TELEPHONE PING PONG? TRY ELECTRONIC MAIL
  Room: 1C, 1960 Building

  Yvonne Bergland
  Wesley Budke
  The National Center for Research in Vocational Education

  The technology of electronic mail was described, its advantages and uses were discussed, and procedures for joining ADVOCNET--the electronic mail network for adult, vocational, and technical education--were explained. The various features of the Dialcom system--including electronic publishing, the news clipping service, and conferencing--were also presented. See questions and answers about ADVOCNET in appendix A, pp. 35-36.

- THE FUTURE ENVIRONMENT FOR VOC ED
  Room: North Auditorium, 1900 Building

Morgan Lewis
Jeannette Fraser
The National Center for Research in Vocational Education

This session presented an overview of the major economic, technological, and demographic forces that will shape the future environment for vocational-occupational education. Rapid advances in technology and the economy are changing the nature of work performed in the United States. As work changes, vocational and occupational education must adapt to these changes. Not only must new skills be taught, but programs must also respond to changes in the characteristics of students, the delivery of instruction, and the role of the instructor. Secondary programs will be likely to put more emphasis on vocational education as a means of achieving general education goals (basic skills), whereas postsecondary programs will be likely to become more diverse and provide more upgrading and retraining in addition to initial skill training. Educators, as trainers of tomorrow's work force, need to be able to anticipate these changes and develop appropriate responses.

1:30 PM CONCURRENT SESSION #3. (Participants chose one workshop.)

- OHIO HIGHLIGHTS: ACTION AGENDA FOR THE CHANGING WORKPLACE
(This is the second part of a double-length session.)
Room: 1A, 1960 Building

  Sonia M. Price
  Ohio Department of Education

  Brenda Hallensen
  Clifford Migal
  Dale Baughman

- UTILIZING R & D PRODUCTS IN STRATEGIC PLANNING AND HUMAN DEVELOPMENT
Room: 1B, 1960 Building

  Warren H. Groff
  North Central Technical College (OH)

  This session assisted participants in interpreting the societal transition from an industrial to a postindustrial, technical, information society. The implications for strategic planning and human resource development using R&D products were discussed. The value of strategic planning as a tool that can help shape the "school of the future," or the "electronic college," was emphasized.

- USING LABOR MARKET AND ENROLLMENT DATA FOR SECONDARY-POSTSECONDARY ARTICULATION
  Room: 1C, 1960 Building

  Meg Murphy
  North Carolina Department of Public Instruction

  The importance of interpreting the steps involved in a data-justified decision-making process regarding articulated curriculum development was presented. In addition, participants sought to identify sources of data supporting curriculum decisions in vocational education and investigated standards/criteria for decision making. A sample decision-making diagram taking into account decision points and chance events is found in appendix A, p. 38.

- NNCCVTE--A NETWORK THAT WORKS!
  Room: North Auditorium, 1900 Building

  Rebecca S. Douglas, Director
  East Central Network for Curriculum Coordination (IL)

  Barbara Luckner-Loveless, Associate Director
  Western Curriculum Coordination Center (HI)

  Curriculum network activities and their implications for vocational teachers, administrators, and State department of education personnel were presented. The history and major responsibilities of the network were described and representatives of four curriculum coordination centers spoke about their individual network activities. A summary of the cost-effectiveness of the network was also stressed.

2:20 PM REFRESHMENT BREAK--Room: 1A, 1960 Building

2:40 PM CONCURRENT SESSION #4. (Participants chose one workshop.)

- TIME ON TASK: A TOOL TO IMPROVE VOCATIONAL EDUCATION
  Room: 1A, 1960 Building

  Ida Halasz
  The National Center for Research in Vocational Education

  Time-on-task analysis is an excellent tool for assessing how students use time in vocational classes. Based on the analysis, teachers can determine how to change their

teaching in order to increase student opportunities to learn and build their skills. This session demonstrated how time on task analysis could be used to improve vocational education. Data collected from a research study conducted by The National Center for Research in Vocational Education clearly illustrated how vocational-technical students used time in the classroom and methodology was presented for the improvement of student performance. Results of the National Center research in graph form and other time on task materials are included in appendix A, pp. 39-44.

- ROBOTICS--FLEXIBLE MANUFACTURING IN EDUCATION
  Room: 1B, 1960 Building

  Arthur M. Peters
  TII Robotics Systems, Inc. (IL)

  In this session the various technologies that comprise a sccessful course on robotics and flexible manufacturing were presented along with those skills required to train employable students for industry. (Repeated during Session #5.)

- USING LABOR MARKET AND ENROLLMENT DATA FOR SECONDARY POSTSECONDARY ARTICULATION
  (This is a repeat of session #3.)
  Room: 1C, 1960 Building

  Meg Murphy
  North Carolina Department of Public Instruction

- ENTREPRENEURSHIP EDUCATION-A CHANGE PROCESS--VOCATIONAL EDUCATION, THE VEHICLE
  Room: North Auditorium, 1900 Building

  Novella Ross
  The National Center for Research in Vocational Education

  Vocational education has become the vehicle to organize diverse entrepreneurial sectors (business, industry, labor, government, and education) into a cohesive team to plan the infusion of entrepreneurship education into vocational and adult education. A consortium of 25 States presently exists for this purpose. As a follow-up to some of the recommendations provided by the attendees, some additional States will be contacted and invited to join the consortium. (See also "Why Entrepreneurship Emphasis" in appendix A, p. 45.)

3:40 PM CONCURRENT SESSION #5. (Participants chose one workshop.)

- POSTSECONDARY VOC-TECH ADVISING AND COUNSELING
  Room: 1A, 1960 Building

  Carol Pyles
  Sandra Arky
  Houston Community College System (TX)

  Community colleges by definition address the educational and training needs of a particular clientele as well as meet the ever-expanding needs of industry for training workers. An interface between technical faculty and student services is imperative to address the individual learning styles of students. Techniques for the utilization of individual learning styles in classroom situations were presented as well as methods for counselors to enhance learning situations beginning with the initial assessment of a student up to and including the student's participation in class.

- ROBOTICS--FLEXIBLE MANUFACTURING IN EDUCATION
  (This is a repeat from session #4.)
  Room: 1B, 1960 Building

  Arthur M. Peters
  TII Robotic Systems, Inc. (IL)

- A SEARCH IN TIME . . . SAVES!
  Room: 1C, 1960 Building

  Judy Wagner
  The National Center for Research in Vocational Education

  ERIC, VECM, RIVE, and other databases are filled with program descriptions, curriculum materials, courseware, and practical ideas that can save time and money. Attendees were encouraged to become aware of these resources in their own areas so that they could have ready access to all the information available.

- THE SPECIAL EDUCATION SOFTWARE CENTER . . . AND YOU
  Room: North Auditorium, 1900 Building

  Phyllis Baker
  LINC Resources, Inc. (OH)

Finding instructional and administrative microcomputer software for special needs students is not an easy task. This session provided information and suggestions for the development of a center designed to assist parents, teachers, administrators, and others involved in the education of handicapped persons. The individual services of the three segments of this software center: SRI International (formerly Stanford Research Institute), LINC Resources, Inc., and the Council for Exceptional Children, Children--were explained.

4:30 PM ADJOURNMENT
Bus transportation to University Hilton Hotel.

5:45 PM NO HOST RECEPTION
Voyager Room, University Hilton Hotel

A mixer for conferees, their guests, and National Center staff at large

Musical Entertainment: HARESUITE

7:00 PM DINNER

WEDNESDAY--NOVEMBER 14, 1984

AM Chairperson: Mac McCaslin

8:00 AM ANNOUNCEMENTS AND REFRESHMENTS

8:30 AM CONCURRENT SESSION #6. (Participants chose one workshop.)

- WE ALL HAVE QUESTIONS . . . WE ALL HAVE ANSWERS
Room: 1A, 1960 Building

Jan Novak, Project Director
Vocational Studies Center (WI)

We all ask, "What is the best way to get this information out?" And we all have ideas on how to do this! The first part of the session highlighted vehicles used by the Vocational Studies Center (University of Wisconsin-Madison) to disseminate information and provide services at local, State, and National levels. The second part encouraged all participants to describe an area in wnich

they would like ideas for dissemination or planning. The group then "brainstormed" activities and suggestions to help their colleagues.

Two of the major concerns addressed were working with business and industry and getting your money's worth out of educational software. "A Step by Step Process for 'Getting the Information Out" is found in appendix A, pp. 47-51.

- JOB DEVELOPMENT ON A SHOESTRING
  Room: 1B, 1960 Building

  Carol Spencer
  Wilberforce University (OH)

  Developing jobs for cooperative education students is time consuming and can be expensive. This session shared a few ideas and techniques for developing an effective job development "campaign package" for a mandatory postsecondary cooperative education program.

- VOCATIONAL ADMINISTRATORS' USE OF MICROCOMPUTERS
  Room: 1C, 1960 Building

  Todd Strohmenger
  Appalachia Educational Laboratory (WV)

  This session focused on the use of microcomputers as tools to enhance the management skills of vocational administrators. It provided a broad overview of off-the-shelf-utility software including word processing, database management, electronic spreadsheets, project management, business graphics, integrated and integrator programs, and decision making, and thought-processing programs. An annotated list of management software programs and information on the AEL TechLine are found in appendix A, pp. 53-58.

- ASSESSING PROGRESS TOWARD INDIVIDUALIZATION
  Room: North Auditorium, 1900 Building

  Richard J. Smith
  Texas State Technical Institute

  Participants learned the criteria for assessing instructional programs for the basis of individualization as a method for converting the instructional methodology in postsecondary vocational-technical institutions. Documentation shared included an assessment instrument

measuring progress toward individualization of programs, based on the "indicators" of individualization model developed at Texas State Technical Institute. (See appendix A, pp. 59-71.)

9:30 AM CONCURRENT SESSION #7. (Participants chose one workshop.)

- AN ALTERNATIVE APPROACH TO VOCATIONAL EDUCATION CURRICULUM
  Room: 1A, 1960 Building

  Joanna Kister
  Ohio State Department of Education

  Students today will live most of their lives in the 21st century. Will our traditional vocational education prepare them adequately?

  In Ohio, we have developed a process model curriculum that emphasizes thinking skills in the context of vocational home economics.

  During this presentation, curriculum development implications of behaviorist and developmental/humanist perspectives were explored; differences between qualitative and quantitative research as bases for curriculum development were noted; and the rationale for a practical problem approach to voc ed curriculum development was explored. Discussion at this workshop centered on business and industry trends and their implications for an alternative approach to vocational education curriculum.

- ADAPTING VOCATIONAL ASSESSMENT TO THE CONSTRAINTS AND NEEDS OF THE IN-SCHOOL SETTING: A PROBLEM-SOLVING STRATEGY
  Room: 1B, 1960 Building

  Delores H. Nelson
  Debra G. Hammer
  Kentucky Department of Education

  The Fayette County (KY) Vocational Assessment Guide was present through discussion and videotape as an affordable, practical vocational assessment strategy from an educator's point of view. It stresses the preparation of special needs pupils for appropriate vocational placements. Fayette County's solutions to common problems associated with in-school vocational assessments and based upon 7 years of experience were addressed during this session.

- USING INTERACTIVE VIDEO TECHNOLOGY TO TEACH TECHNOLOGY
  (This is a repeat of session #1.)
  Room: 1C, 1960 Building

  Ann V. Brown
  IVES, Inc. (MI)

- BRIDGING THE GAP BETWEEN RESEARCH AND PRACTICE: BUILDING A NETWORK FOR DISSEMINATING RESEARCH ON YOUTH EMPLOYABILITY
  Room: North Auditorium, 1900 Building

  Margo Vreeburg Izzo
  The National Center for Research in Vocational Education

  This presentation described the user-driven dissemination strategy currently being used to build a network of National associations that have an interest in research on youth employability. The goals of the project itself are to translate the research results into applicable products and articles for school personnel including administrators, teachers, guidance counselors, and the youth themselves.

  This workshop focused on the following objectives relative to this model for network building:

  - Selecting your target audience
  - Finding out needs and interests of the target audience
  - Meeting those needs and interests through a mutual collaborative agreement

  Samples of brochures developed using this strategy were shared and articles currently in development were provided.

10:20 AM REFRESHMENT BREAK--Room: 1A, 1960 Building

10:40 AM CONCURRENT SESSION #8. (Participants chose one workshop.)

- IS YOUR CURRICULUM "DISSEMINABLE"?
  Room: 1A, 1960 Building

  Ruth Volz Patton
  East Central Network for Curriculum Coordination

How "disseminable"is your curriculum? Can it be made more disseminable through format? This presentation created an awareness of existing curriculum formats and compared and evaluated examples. A checklist of format criteria developed by State liaison representatives of the East Central Network was shared.

- DISSEMINATION/DIFFUSION OF A FOOD PRODUCTION/FOOD SERVICE CURRICULUM
  Room: 1B, 1960 Building

  Beth Packard
  Arizona Center for Vocational Education

  This session provided a "how-to" approach to curriculum implementation. Four steps in the professional development process necessary to move from introduction to full utilization of a competency-based/performance-based curriculum were presented:

  - Introduction
  - Demonstration and practice
  - Planning and implementation
  - Technical assistance

  Publicity and public relations efforts that support dissemination were also stressed.

- IDENTIFYING, EVALUATING, AND INTEGRATING MICROCOMPUTER COURSEWARE FOR VOCATIONAL AND TECHNICAL EDUCATION
  Room: 1C, 1960 Building

  Shirley A. Chase
  The National Center for Research in Vocational Education

  Are you frustrated in trying to locate and select microcomputer courseware for instruction? During this session, information was presented on locating courseware through databases, especially VECM; the use of courseware; choosing and evaluating courseware to meet instructional needs; and procedures for integrating courseware into the teaching/learning situation. (See "Courseware Evaluation: Form and Guide" and accompanying materials in appendix A, pp. 73-84.)

- ORGANIZATIONAL HEALTH: A PREREQUISITE FOR MEANINGFUL CHANGE
  (This is a repeat of session #1.)
  Room: North Auditorium, 1900 Building

  Marvin Fairman
  University of Arkansas

11:30 AM LUNCHEON
Room: 1A, 1960 Building

RECOGNITION AWARDS: SELECTED EXEMPLARY PRODUCTS

Dr. Robert E. Taylor
Executive Director
The National Center for Research in Vocational Education

PM Chairperson: Jay Smink

12:30 PM SESSION #9. ONE OF TWO SPECIAL ACTIVITIES SELECTED

- ROUNDTABLE DISCUSSIONS OF SELECTED EXEMPLARY PRODUCTS

  Group 1 (12:30-1:20 PM--each roundtable presented twice)

  1. Career Redirections for Adults, Marilyn Clark, Northwest Regional Education Laboratory (OR)

  2. Education for Employment--Planning for Economic Development: A Strategic Approach, James Leach, University of Illinois

  3. Making It Work--In-service Training Program for Vocational Education, Elaine Cadigan, Massachusetts State Department of Education

  4. Target: Employment--A Resource Guide to Job-seeking and Job-retention Materials, James Pershing, Vocational Education Services, Indiana University

  Room 1A--Numbers 1,3, & 4; Room 1B--Number 2

Group 2 (1:30-2:20 PM--each roundtable presented twice)

5. Communication Skills I & II and A New Look at an Old Skill: Reading in the Vocational Classroom, Tom Hindes, Instructional Materials Laboratory, The Ohio State University

6. Leadership Development through Planned Instruction in Vocational Education, Joseph Cvancara, Department of Agriculture and Home Economics, Washington State University

7. Presenting Cooperative Education--A Guide for Providing Information about Cooperative Education and Recruiting Work Stations, Seymour Lesh, National Child Labor Committee (NY)

Room #'s 5 & 6; Room #7

- TAILOR-MADE STRATEGIES OF DISSEMINATION
Room: North Auditorium, 1900 Building

H.S. Bhola
Indiana University

Peter Seidman
Illinois State Board of Education

Linda Lotto
The National Center for Research in Vocational Education

Inventing and disseminating change are integral parts of the daily tasks of vocational education professionals. The session sought to improve the effectiveness of these tasks by (1) making the point that tailor-made, situation-specific strategies are the only sensible option; (2) demonstrating the fact that the design of such strategies is within the capabilities of the non specialist disseminator; and (3) sharing procedures that may make a disseminator's life easier.

The principles of planned change presented by Bhola are based on the CLER model, which suggests that innovation diffusion or planned change is a function of optimization of four variables:

- Configurations and their relationships brought into being by the change transaction between the planner and the adopter systems
- Linkages within and between the planner and adopter systems
- The environments of the planner and adopter systems
- Resources available to facilitate change

See "Tailor-Made Strategies of Dissemination" (appendix A, pp. 85-104) for an explanation of the process.

2:40 PM CONCURRENT SESSION #10. (Participants chose one workshop.)

- DEVELOPMENT OF AN EXEMPLARY PRODUCT Room: 1A, 1960 Building

  Elaine Cadigan
  Massachusetts State Department of Education

  One element of critical importance in the understanding and acceptance of materials for use by local schools is the involvement of those schools and State department of education staff in the developmental process. This presentation recounts the experiences of the Massachusetts Department of Education, Department of Occupational Education, in the development and dissemination of Making It Work: An In-service Training Program for Vocational Education. Aspects highlighted included the project advisory committee and its role, personnel training, and background on the Massachusetts vocational education structure and its equity plan.

- COMPETENCY-BASED CAREER GUIDANCE MODULES
  Room: 1B, 1960 Building

  Bob Campbell
  The National Center for Research in Vocational Education

  The Competency-based Career Guidance (CBCG) Module Series is comprised of 34 professional development training modules for the systematic preservice and inservice preparation of career guidance personnel. This session allowed both present and prospective career guidance personnel from various settings to develop and improve their skills in planning, supporting, implementing, operating, and evaluating their career guidance program.

- VOSCAN: AN ELECTRONIC DATABASE FOR VOCATIONAL EDUCATION
  Room: 1C, 1960 Building

  Jeff Lake
  East Central Network, Illinois Vocational Curriculum Center

  A demonstration of VOSCAN, the easy-to-use electronic information exchange of the Illinois Vocational Curriculum Center, was offered. VOSCAN contains information pertaining to five vocational areas. In addition, there is a section of task lists and learning guides available

from the IVCC, and sample task lists and learning guides that can be downloaded to the user's printer. Vocational educators can either use the existing system through the East Central Network for their dissemination activities or establish their own network.

Discussion during this session centered on technical aspects and problem solving related to software modification, equipment dedication, and hackers.

- WORDS WORTH PROCESSING Room: North Auditorium, 1900 Building

  Ross Thomson
  New York State Department of Education

  The purpose of this session was to show how information that is already being gathered, compiled, and published can be "packaged" for broader dissemination through word processing--thus increasing public awareness of vocational education objectives and outcomes. A New York State background study on information dissemination resulted in the simple, practical techniques shared here that can provide better information for wider audiences. Examples of press releases and capsule news reports were shared.

3:40 PM CONCURRENT SESSION #11. (Participants chose one workshop.)

- TRENDS AND ISSUES IN ADULT EDUCATION
  Room: 1A, 1960 Building

  Susan Imel
  The National Center for Research in Vocational Education

  Kathleen Theil
  Lakewood Public Schools (OH)

  Because of increasing interest in adult education, it is helpful for disseminators in vocational education to be aware of major issues in that field. This session highlighted current, "hot" trends in adult education, focusing on adult education legislation, adult literacy, the implications of changing technologies, certification, and coordination/turf issues. After issues were presented, participants were invited to nominate trends that they themselves had noted.

- COMPETENCY-BASED VOCATIONAL EDUCATION IN MASSACHUSETTS--A SCHOOL-BASED STATEWIDE MODEL
  Room: 1B, 1960 Building

  Shirley McClean
  Sheila Herbert
  Massachusetts State Department of Education

  The plan, procedures, and resources of an effective and replicable competency-based vocational education curriculum development program were shared during this session. Attendees learned how practicing vocational instructors were trained and supported in the development of a CBE staff training manual and CBVE curriculum. The "paired school" concept of curriculum development and the "peer-to-peer" dissemination technique were explained. The CBVE staff training manual, several complete CBVE staff training manuals, and a number of learning guides were among the resources displayed. (This is repeated in session #12)

- ELECTRONIC ACCESS TO A STATE CURRICULUM RESOURCE CENTER
  Room: 1C, 1960 Building

  Tim MacLaughlin
  Gloria Kielbaso
  Michigan Vocational Education Resource Center

  The session demonstrated how counselors, administrators, and teachers access the Michigan Career Education/Vocational Education Resource Center via a telecommunications system. This "total system" is a learning tool for targeted audiences who wish to use a electronically transmitted information. Users request vocational news, conferences and workshops, new products, and software; search document holdings housed in the Center, and request information via the Info Exchange--all while avoiding telephone tag! A question and answer period followed for sharing and comparing information.

- BUILDING LOCAL CONSENSUS
  Room: North Auditorium, 1900 Building

  Joe E. Shively
  Appalachia Educational Laboratory (WV)

  What are the educational needs of vocational administrators, vocational teachers, and the local community? How do you determine these needs, how do you

build local consensus, and how do you disseminate the information? This session provided vocational educators with an overview of a structured process for identifying voc ed needs from a variety of perspectives, a procedure for building local consensus, and a mechanism for dissemination. (See appendix A, pp. 105-117.)

4:30 PM ADJOURNMENT
Bus transportation to University Hilton Hotel

THURSDAY--November 15, 1984

AM Chairperson: Judith Samuelson

8:00 AM ANNOUNCEMENTS AND REFRESHMENTS

8:30 AM CONCURRENT SESSION #12. (Participants chose one workshop.)

- COMPETENCY-BASED VOCATIONAL EDUCATION IN MASSACHUSETTS--A SCHOOL-BASED STATEWIDE MODEL
(This is a repeat of session #11.)
Room: 1A, 1960 Building

Shirley McClean
Sheila Herbert
Massachusetts State Department of Education

- ACTIONCODE: THE INTERACTIVE VIDEODISC TRAINING SYSTEM
Room: 1B, 1960 Building

Chip Harris
Pat Anderson
National Education Corporation (CT)

Participants learned about ActionCode, an interactive videodisc training system that combines up-to-date courseware with state-of-the-art hardware in electronic and mechanical technology. ActionCode can be utilized in varied ways including specific training, complete courses, and supplemental study.

- TIRED OF TELEPHONE PING PONG? TRY ELECTRONIC MAIL
Room: 1C, 1960 Building
(This is a repeat of session #2.)

Yvonne Bergland
Wes Budke
The National Center for Research in Vocational Education

9:30 AM CONCURRENT SESSION #13. (Participants chose one workshop.)

- GAINING ACCEPTANCE AS AN AWARD-WINNING PROGRAM
  Room: 1A, 1960 Building

  Rebecca Douglas
  East Central Network (IL)

  Vocational programs that receive the U.S. Secretary of Education's Award of Recognition exemplify the most valuable features of a quality vocational program. What makes a vocational program acceptable for nomination? Answers to this question were explored as participants became familiar with the award program and the criteria used in judging nominations through discussion and mock nominations.

- CORRECTIONS EDUCATION:
  UNTAPPED DISSEMINATION OPPORTUNITIES
  Room: 1B, 1960 Building

  Ida Halasz
  The National Center for Research in Vocational Education
  Until very recently, corrections education was left out of the mainstream of funding and consideration by "regular" educators. Recent Federal funding and National attention to the importance of educating inmates has highlighted the needs of correction educators for many curriculum and other materials. During this presentation, participants examined critical need areas in corrections education, heard a profile of inmates nationally, and learned how some of those needs could be met by "regular" educators.

- MANAGING DATABASES WITH MICROCOMPUTERS
  Room: 1C, 1960 Building

  Ruth Gordon
  Naomi Jacobs
  Sandra Kerka
  The National Center for Research in Vocational Education

  This informal panel discussion suggested ways to control voc ed information and disseminate it more quickly and

accurately to those who require it in their work. Three different applications, all using the same software and hardware, were described, including applications for data management, publication of reports and catalogs, data retrieval, and management and accountability reporting.

10:20 AM REFRESHMENT BREAK--Room 1A, 1960 Building

10:40 AM CONCURRENT SESSION #14. (Participants chose one workshop.)

- ADULT VOCATIONAL DEVELOPMENT Room: 1A, 1960 Building

  Walter W. Adams
  Appalachia Educational Laboratory (WV)

  This session reported on two research studies conducted by the Appalachia Educational Laboratory on adults in post-secondary education and vocational training programs, which studied the success and failure of adults in completing the admissions process and first term of school. Information and samples of validated interventions to enhance adult success were presented and discussed with participants.

- ADAPTING VOCATIONAL ASSESSMENT TO THE CONSTRAINTS AND NEEDS OF THE IN-SCHOOL SETTING: A PROBLEM-SOLVING STRATEGY (This is a repeat of session #7.)
  Room: 1B, 1960 Building

  Delores H. Nelson
  Debra G. Hammer
  Kentucky Department of Education

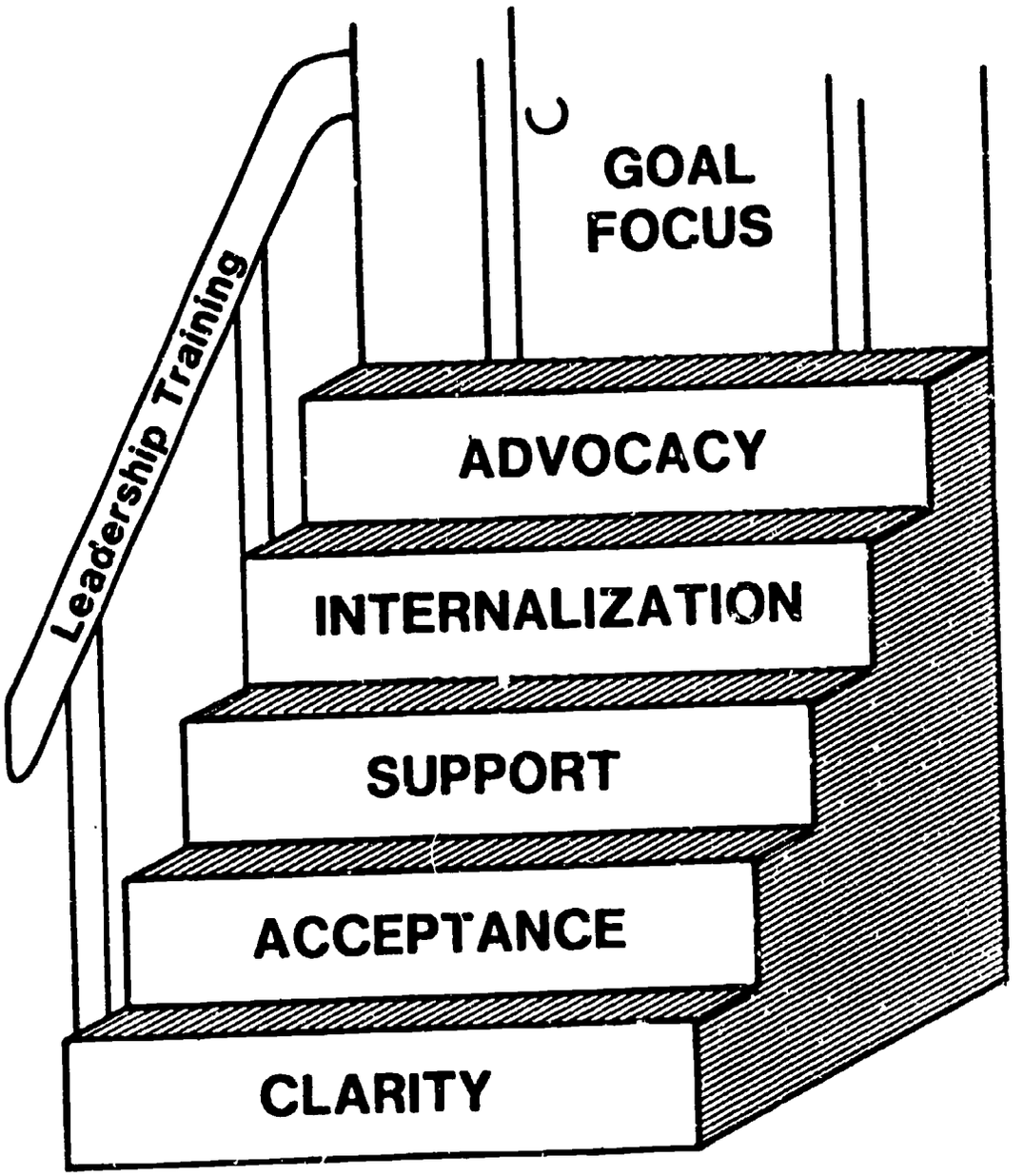
- IDENTIFYING, EVALUATING, AND INTEGRATING MICROCOMPUTER COURSEWARE FOR VOCATIONAL/TECHNICAL EDUCATION
  (This is a repeat of session #8.)
  Room: 1C, 1960 Building

  Shirley Chase
  The National Center for Research in Vocational Education

11:30 AM CONFERENCE WRAP-UP, EVALUATION, AND FINAL ADJOURNMENT
Room: 1A, 1960 Building

Appendix A

Selected Handouts and Presentation Materials



SEQUENTIAL STEPS FOR IMPROVING GOAL FOCUS

Marvin Fairman and Connie Lucas, "Sharpening the Focus on Goal Focus," Educational ership, February, 1983.

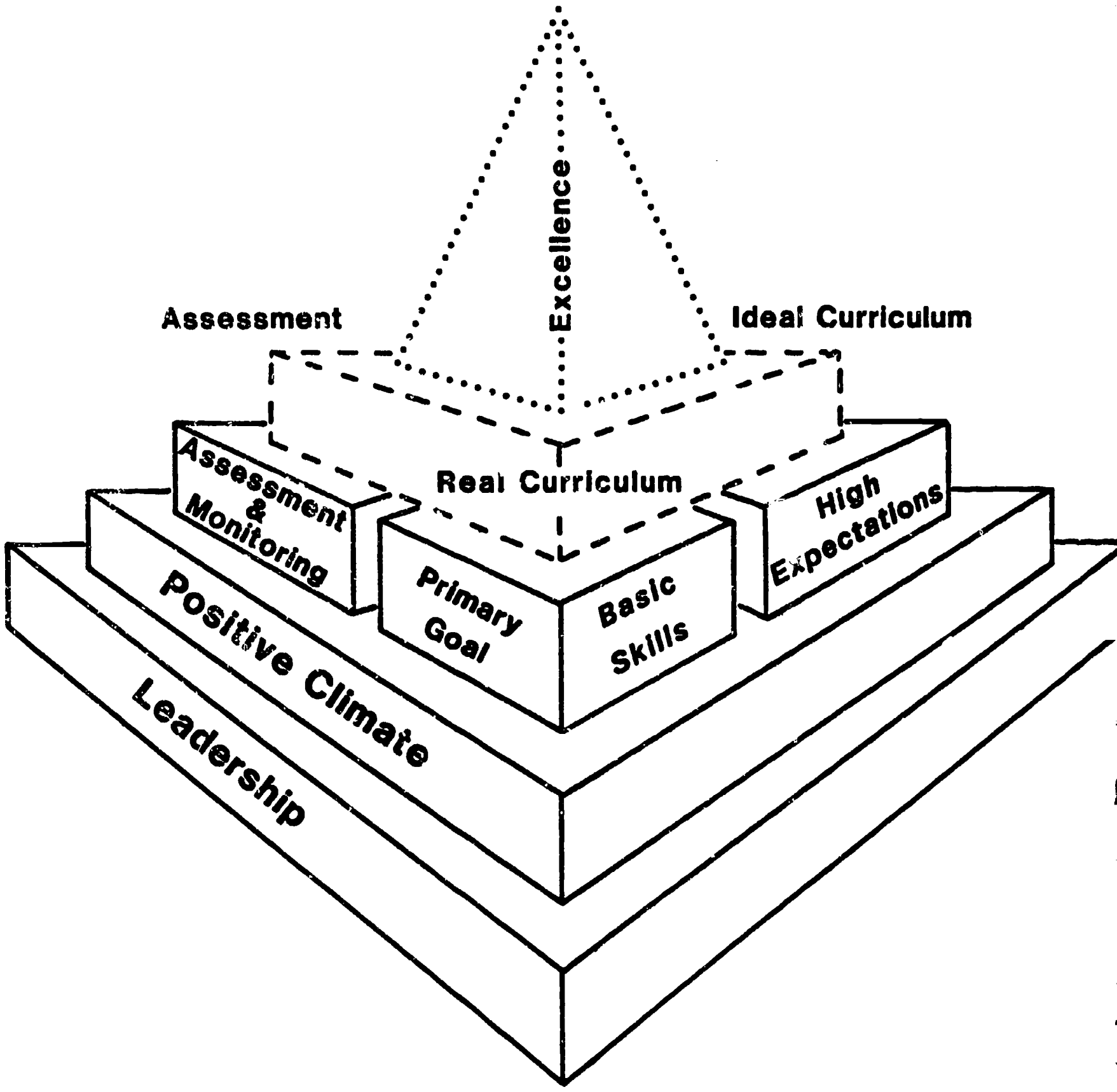


Figure 3. Factors contributing to increased organizational productivity: A conceptual view.

Marvin Fairman and Elizabeth Clark, "Effective Schools' Research: Implications for School Reform," NASSP Bulletin, accepted for publication.

THE NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION

ROME

RESOURCE AND REFERRAL SERVICE

Resource Organizations and Meetings for Educators (ROME) Data Base

PROJECT PROFILE

The Resource Organizations and Meetings for Educators (ROME) data base contains descriptions of nonprofit professional organizations, research organizations, advocacy groups, and agencies in education and related disciplines. Over 1,000 organizations are represented in the data base, with 1,200 anticipated by November 30, 1984. ROME also includes professional meetings and publications.

ORGANIZATIONAL PROFILES

The organizations in the data base offer resources and current information needed to solve educational problems. For this reason, ROME includes many types of organizations: citizen-parent groups, clearinghouses, consortiums, centers affiliated with universities, networks, government agencies, research and development laboratories, public service organizations, and more. The information provided for each organization includes directory-type information (such as name and address); funding source(s); an abstract detailing background, purpose, and publications; subject terms that describe the organization's objectives and activities; and other pertinent information.

ROME may be used to obtain complete information about a particular organization when only partial information is known; for example, the telephone number and contact person, if only the organization name is known, or the full name represented by an acronym. A subject search will identify organizations concerned with specific topics, such as school finance, early childhood education, and microcomputers. Organizations identified in the data base through a computer search should be contacted for up-to-date information about their publications, activities, or services.

PRODUCTS AND PROJECTS

Many of the newsletters, journals, and documents produced by organizations in the data base have separate entries as products. Descriptions of research and development projects may be added at a later date.

MEETINGS

ROME is unique in providing on-line access to information on regional, national, and international meetings of interest to educators and others associated with education. Selected workshops, seminars, conferences, and symposia are included. The information provided for each meeting comprises the title, dates, location, contact information, sponsor(s), cost, and subject terms that describe the content of the meeting. Forthcoming meetings in a particular city or state, during a certain month, on a particular topic, or targeted for a specific audience can readily be identified, as well as the date and place of a particular meeting.

ACCESS

ROME is a public data base developed by the Resource and Referral Service, a project of the National Center for Research in Vocational Education, with Bibliographic Retrieval Services, Inc., as the subcontractor. The Resource and Referral Service is part of the Research and Development Exchange (RDx), a dissemination network comprised of eight regional educational laboratories. The names and addresses of the RDx members who will either provide search services for ROME or make referrals to services within their regions are printed on the reverse of this sheet.

FOR FURTHER INFORMATION, CONTACT
THE NATIONAL CENTER PROGRAM INFORMATION OFFICE
TEL: (614) 486-3655 OR (800) 848-4815
CABLE: CTVOCEDOSU/COLUMBUS,OHIO

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FOR RESEARCH IN VOCATIONAL EDUCATION
THE OHIO STATE UNIVERSITY
1960 KENNY ROAD · COLUMBUS OHIO 43210

AEL Regional Exchange
Appalachia Educational Laboratory, Inc. (AEL)
P.O. Box 1348
Charleston, West Virginia 25325
(304) 347-0420
Contact: Sandra Orletsky
States served: Alabama, Florida, Georgia, Kentucky, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia

FWL Regional Exchange
Far West Laboratory for Educational Research and Development (FWL)
1855 Folsom Street
San Francisco, California 94103
Telephone: (415) 565-3151
Contact: Lynn Jenks
States served: Northern California, Nevada, Utah

McREL Regional Exchange
Mid-continent Regional Educational Laboratory (McREL)
4709 Belleview Avenue
Kansas City, Missouri 64112
(816) 756-2401
Contact: Susan Everson
States served: Colorado, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin, and Wyoming

Northeast Regional Exchange
101 Mill Road
Chelmsford, Massachusetts 01824
(617) 256-3985
Contact: J. Lynn Griesemer
States served: Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont

Northwest Regional Exchange
Northwest Regional Educational Laboratory (NWREL)
300 S.W. Sixth Avenue
Portland, Oregon 97204
(503) 248-6800
Contact: Joe Pascarelli
States served: Alaska, Hawaii, Idaho, Montana, Oregon, and Washington

RBS Regional Exchange
Research for Better Schools, Inc. (RBS)
444 North Third Street
Philadelphia, Pennsylvania 19123
(215) 574-9300
Contact: Richard McCann
States served: Delaware, Maryland, New Jersey, and Pennsylvania

SEDL Regional Exchange
Southwest Educational Development Laboratory (SEDL)
211 East Seventh Street
Austin, Texas 78701
(512) 476-6861
Contact: Martha Smith
States served: Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma, and Texas

Western Regional Exchange
SWRL Educational Research and Development
4665 Lampson Avenue
Los Alamitos, California 90720
(213) 598-7661
Contact: Barbara Lasser
States served: Arizona, Southern California, Nevada, and Utah

SPONSORSHIP

This activity is sponsored by the National Institute of Education.

Organizations wishing to be included in **ROME** should contact Jay Smink, Project Director, for information. Meeting announcements may be sent directly to the Resource and Referral Service at the National Center.

11/83

AN INVITATION

RRS MEETINGS EXCHANGE

Organizations are invited to announce their regional, national, and international meeting(s) in this publication and in our online database, Resource Organizations and Meetings for Educators (ROME). Send us a brochure or complete and return this form.

Mail to: Resource and Referral Service
The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210-1090
Attention: Jay Smink
Telephone: (800) 848-4815
(614) 486-3655 in Ohio and outside the Continental U.S.
Electronic Mail: the Source, BCD805; BRS, T7E5

Announcements must be received by February 1 for inclusion in the March issue and by August 1 for the September issue.

Meeting Date(s) _____
(month, day, year)

Meeting Title _____

_____

_____

_____

Location _____
(city, state)

Sponsor(s) _____

_____

Contact Person _____
(name)

_____
(address: city, state, zip)

_____
(telephone)

Major themes, key words _____

_____

Please duplicate form if additional copies are needed.

9/84

ADVOCNET

1. What is ADVOCNET?

ADVOCNET is a national electronic mail system linking adult, vocational, and technical educators. The service is provided by ITT Dialcom and features message switching, bulletin boards, and teleconferencing.

2. What are the advantages of electronic mail?

Electronic mail ensures quick, accurate, and economical distribution of information. The computer "mailroom" is accessible 24 hours per day from anywhere in the country. Messages can be sent simultaneously to all or selected network members. A written record of each message is provided.

3. What are some examples of how ADVOCNET can be used?

- o Planning conferences
- o Announcing new products and practices
- o Requesting resources
- o Submitting reports
- o Assessing needs
- o Acquiring materials for databases

4. Is ADVOCNET easy to use?

ADVOCNET is designed for ease of use through everyday terminology and nonthreatening prompts. At any time, you may type "HELP" for instruction on available options. The basic electronic mail fundamentals are covered in six easy interactive activities that take about two hours to complete.

5. How do I find out who is on ADVOCNET?

A membership packet including a directory of ADVOCNET members will be sent to the ADVOCNET coordinator for your state or organization. In addition, the ADVOCNET directory can be accessed when you are online.

6. How many mailboxes should I have?

When first joining the ADVOCNET system, we recommend one mailbox per state or organization. As mail volume increases, the assignment of individual mailboxes might be considered. To provide for networking among key state department of vocational and adult education personnel, we recommend that the following individuals be assigned mailboxes: State Director of Vocational Education (SDVE), State Director of Adult Education (SDAE), State Director of Postsecondary (SDPS), Research Coordinating Unit Director (RCU), State Curriculum Liaison Representative (SLR), State Advisory Council for Vocational Education Representative (SACVE), State Level Guidance Leader (GUID), and the ADVCCNET Coordinator (COOR). Mailboxes can be shared.

7. What equipment will I need?

Basic equipment includes a telephone, a microcomputer or receiving terminal, and a modem. If you have any questions concerning your equipment, please consult an ITT Dialcom Representative or a dealer in your area. If you use a microcomputer or word processor, be sure to get a modem and the necessary software. A printer or CRT is needed to receive mail--some users have both.

8. Is there technical support available?

Technical support materials are provided to all ADVOCNET members. There are six basic activities designed to teach you how to use electronic mail. A system manual will be sent from ITT Dialcom. Consulting support is available by contacting Yvonne Bergland, Judy Wagner or Wesley Budke at (800) 848-4815 or (614) 486-3655. When on the system, just type in HELP and it will respond with instructions on available options.

9. How much will it cost to join and maintain membership?

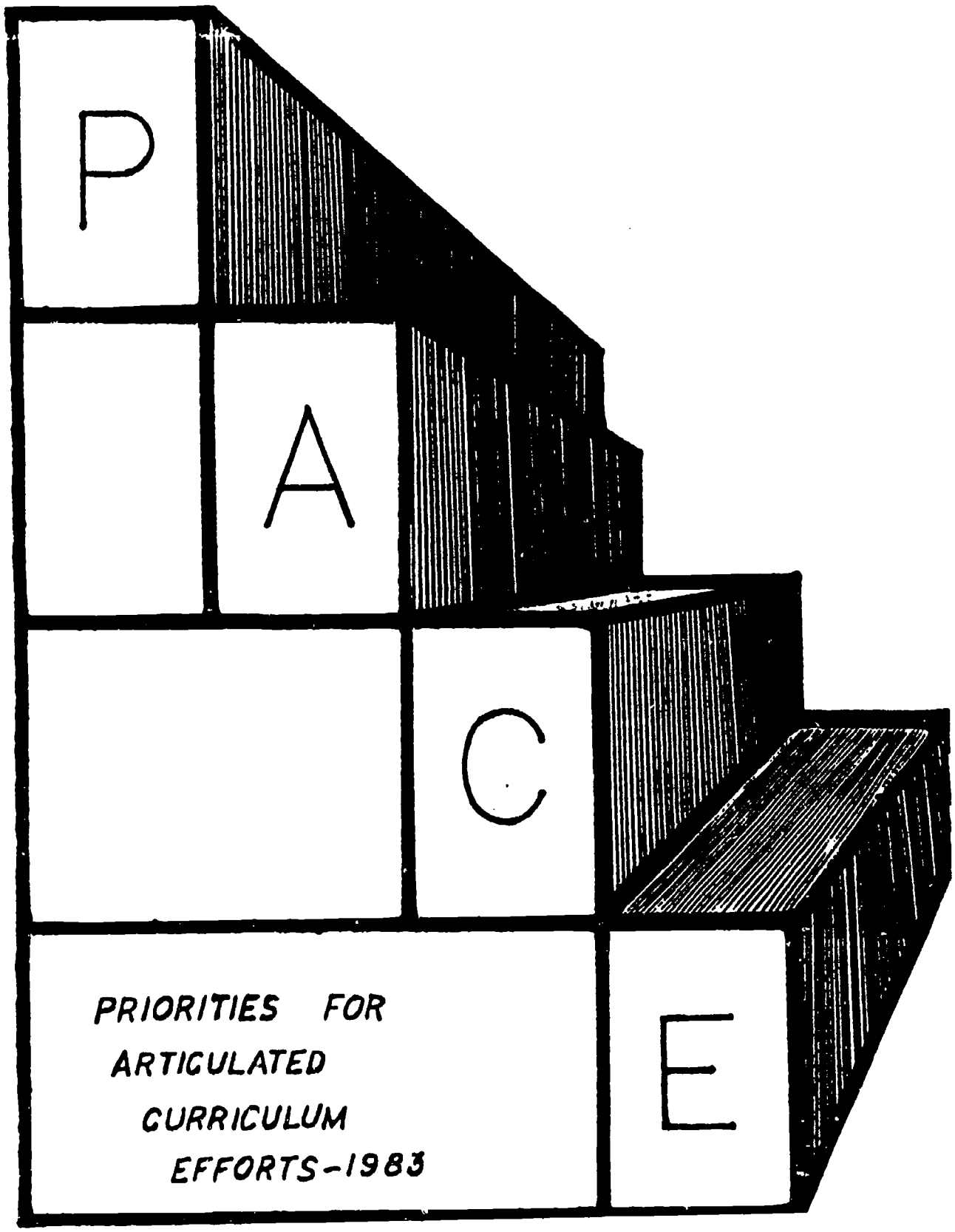
The basic costs include a one-time set-up fee of $10.00 to establish the account and $20.00 per connect hour for electronic mail, including telecommunications. Accounts incurring less than $25.00 in charges in any month will be billed for $25.00 that month to cover administrative costs.

10. How do I join ADVOCNET?

To join ADVOCNET, contact Yvonne Bergland, Judy Wagner, or Wesley Budke at the National Center and request forms and application information by calling (800) 848-4815 or (614) 486-3655 or writing to:

Systems Manager, ADVOCNET
The National Center for Research in Vocational Education
1960 Kenny Road
Columbus, Ohio 43210-1090

MEG MURPHY NORTH CAROLINA
D & U CONFERENCE : OHIO STATE
NCRVE : NOVEMBER, 1984



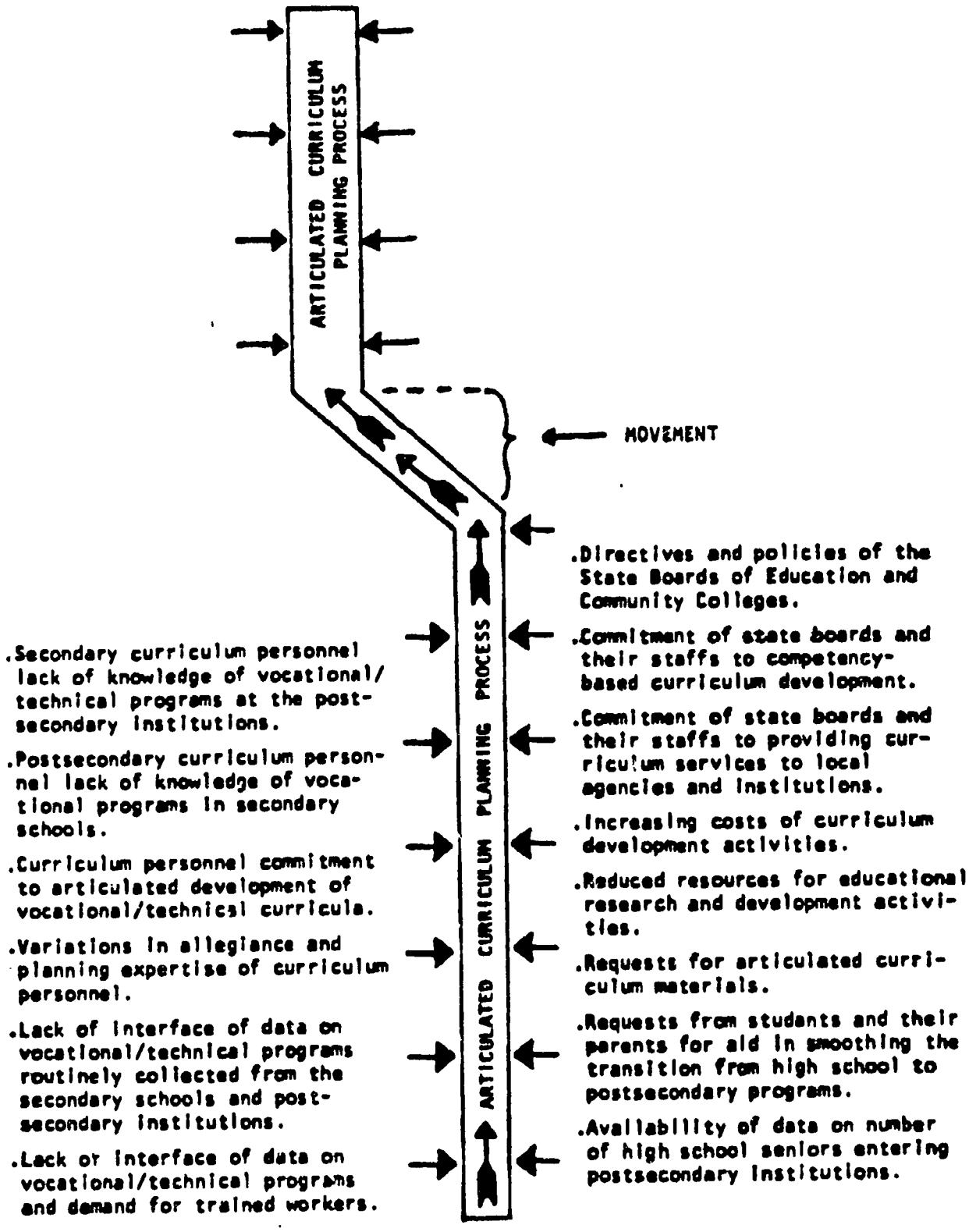


Figure 2.9 Articulated curriculum planning process as a result of both positive and negative forces.

TIME ON TASK: A TOOL TO IMPROVE VOCATIONAL EDUCATION

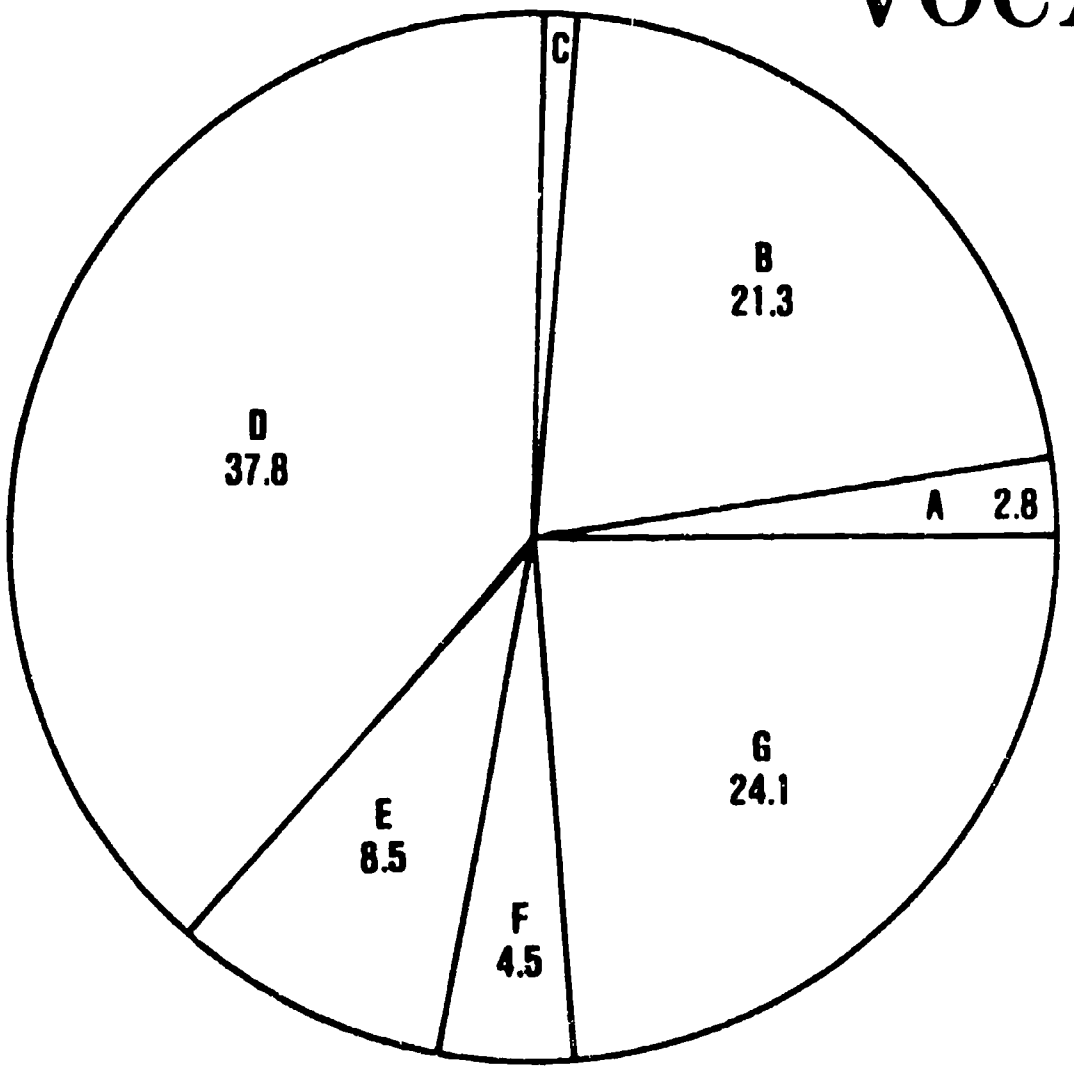
Ida M. Halasz, Ph.D.
Research Specialist
The National Center for Research in Vocational Education

****

Presented at the Seventh Nationwide Vocational Education Dissemination Conference
November 13-15, 1984

STUDENT USE OF TIME IN SELECTED VOCATIONAL CLASSES

(SECONDARY)



KEY

TIME ON TASK
A = BASIC SKILLS
B = THEORY/OTHER CONTENT
C = EMPLOYABILITY SKILLS
D = PRACTICE
E = NONCONTENT

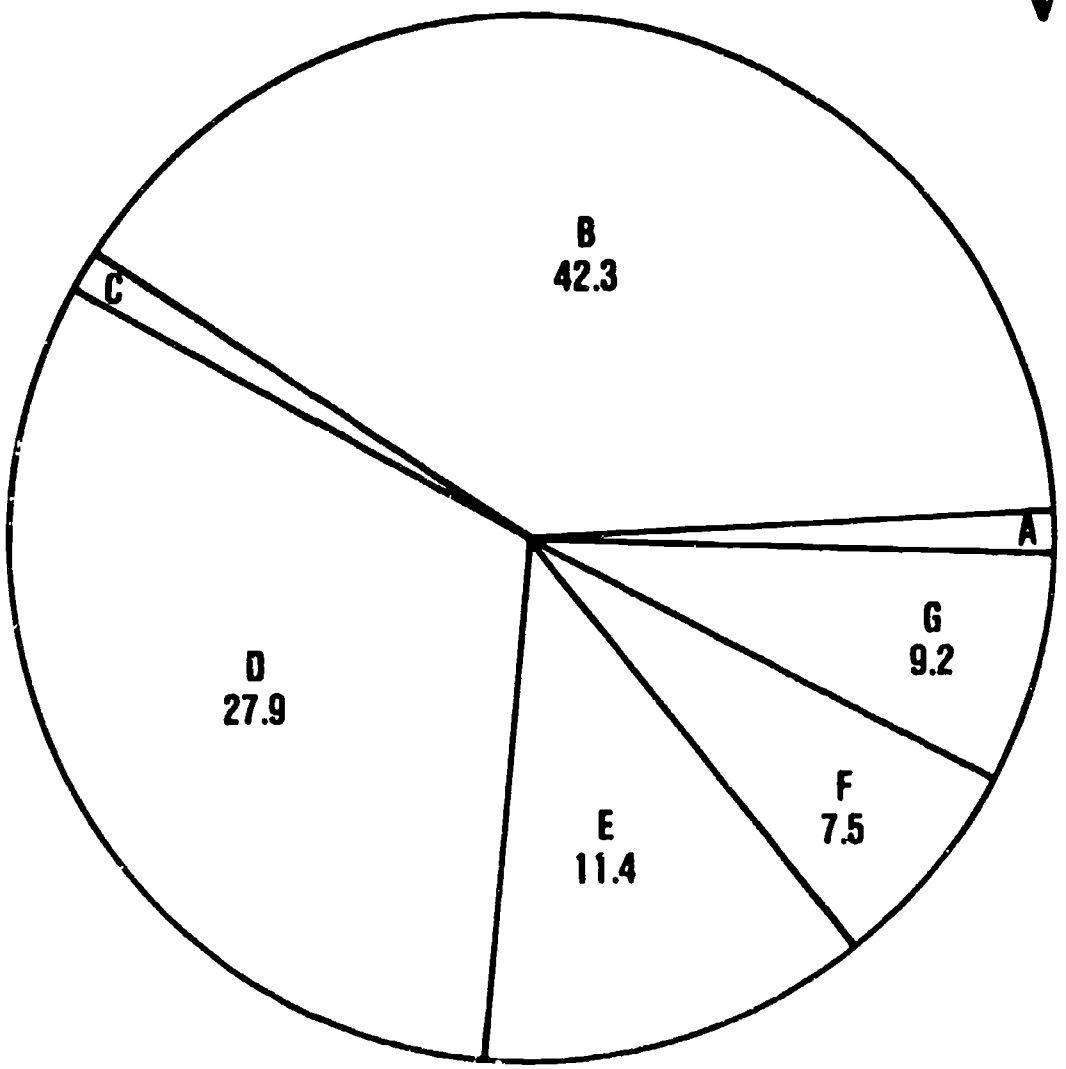
71%

NOT ON TASK
F = BREAK
G = TIME OFF TASK

29%

STUDENT USE OF TIME IN SELECTED VO-TEC CLASSES

(POST-SECONDARY)



KEY

TIME ON TASK
A = BASIC SKILLS
B = THEORY/OTHER CONTENT
C = EMPLOYABILITY SKILLS
D = PRACTICE
E = NONCONTENT

83%

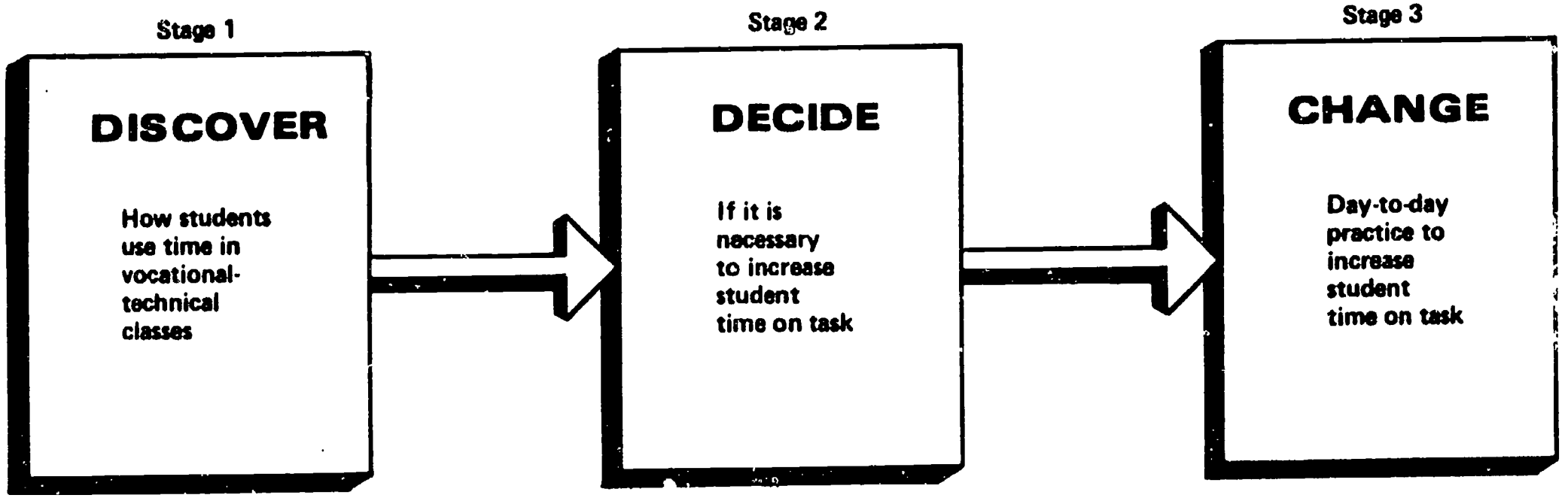
NOT ON TASK
F = BREAK
G = TIME OFF TASK

17%

TEACHING STRATEGIES TO INCREASE TIME ON TASK

- treat time as an important resource,
- define individual and class goals clearly,
- plan and organize class activities in advance,
- use a wider range of teaching methods,
- have positive expectations of students and reinforce them in a positive manner
- encourage students to work independently
- assign meaningful tasks
- minimize scheduled, whole class breaks
- decrease opportunities for interruptions from outside classroom, and
- serve as a role model for the world of work..

STAGES OF USING TIME BETTER



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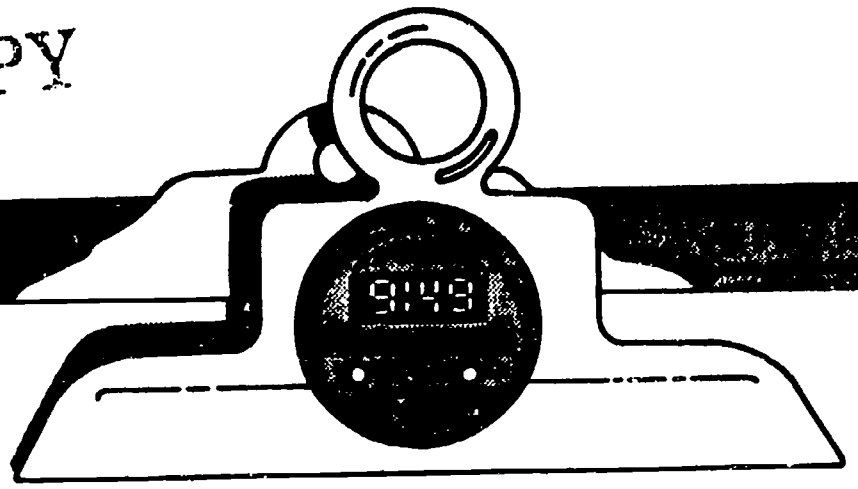

OBSERVATION FORM

Date _____ Class _____

Observation 1 2 3 4 5 Observer _____

School _____ Number of Students Enrolled _____

Class Begins _____ Ends _____

TIME	NUMBER OF STUDENTS ON CURRICULUM-RELATED TASKS						NUMBER OF STUDENTS ON OTHER TASKS			NUMBER OF STUDENTS OFF TASK					NOTES
	Theory of Technical Skills (lecture, discussion, test, etc.)	**Practice of Technical Skills** (hands-on)	**Basic Skills** (read, write, computer)	**Employability Skills** (resumes, world of work information	**Human Relations** (interpersonal, on-the-job)	**Youth Organization Activities** (projects, etc.)	**Set Up** (organize for practice, etc.)	**Clean Up** (own work area, classroom, shop)	**Managerial tasks** (fill out school forms, listen to announcements, etc.)	**Scheduled Class Breaks**	**Individual Breaks**	**Wait**, do nothing, "hang around"	**Whisper**, Talk Quietly	**Behave Disruptively**, Warrants Discipline	Number of Students Present at This Moment	Describe any **unusual circumstances** that are **decreasing time-on-tasks** opportunities such as assemblies, fire drills, etc.
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TOTALS															

Page _____

Source: MANAGING LEARNING TIME: A Vocational Educator's Handbook.

WHY ENTREPRENEURSHIP EMPHASIS

- Currently there are approximately 16.3 million small U.S. businesses not including the single employee operations of which there are probably another 7.1 million. (SBA)

- Small business has provided most of the 20+ million new jobs between 1970 and 1980. (Drucker)

- Since 1980, Fortune 500 companies have lost 3,000,000 jobs while businesses less than ten years old have added at least 750,000 new jobs and more than 1 million new employees. (Drucker)

- Small business income during 1983 increased 18% over the past year, while wage and salary expense rose only 6.1%. (SBA)

- Business bankruptcies, most of which occur in small businesses, declined 10.5% during 1983 -- a marked improvement over the previous year. (SBA)

- In 1981 and 1982, small independent firms created 2,650,000 new jobs, more than compensating for the 1,664,000 jobs lost by large industry. (SBA)

- More than half of the new jobs created in 1981 and 1982 were in the service sector. (SBA)

- Small businesses furnish two-thirds of the jobs for new workers. Many of these are in the services sector, the traditional doorway to the job market for the young, minority and unskilled job seekers. (SBA, 1984)

- Women-owned businesses are growing at an all-time high. In 1983, 2.8 million sole-proprietorships were owned by women (4 times the number in 1977). Including partnerships and corporations the number exceeds 3.7 million, or 25% of all small businesses.

- A large percentage of small businesses (estimate 30-50%) are started by people with only a high school degree or less. (NFIB, Rutgers)

- The areas of greatest job growth in this country are closely identified with traditional vocational education occupation training. (Bureau of Labor Statistics)

- Small businesses employ 48% of the private workforce (SBA)

- 90% of the small businesses in the U.S. employ fewer than 10 people (SBA)

- 600,000 new business uncorporations occurred in 1983 -- 20,000 more than the previous record established in 1981 (SBA)

Jan Novak
Vocational Studies Center
University of Wisconsin-Madison
964 Educational Sciences Bldg.
1025 West Johnson St.
Madison, WI 53706
(608) 263-2806
(608) 263-4357

STEP BY STEP PROCESS FOR "GETTING THE INFORMATION OUT"

Identify the information to be disseminated or communicated:

Is it facts/research, a publication, a service, technical assistance...or what???

Determine the target population:

What are their needs?
Where are they located?
What are their interests?
Age, male/female.....etc.?
How do we communicate with them now (if we do)?

Identify all possible approaches for dissemination/communication:

What have we done in the past?
What do others do?
If we could do anything, what would we want to do?
Brainstorm ideas...

Assess and select dissemination/communication strategies:

(See Worksheet I - attached)

Develop your dissemination/communication plan:

(See Worksheet II - attached)

Implement your plan:

It helps to keep notes or records on required staff time, meetings, costs (expected & unexpected), successes, problems encountered, etc.

(continued)

Evaluate activities and outcomes:

How? Through telephone or mail surveys of target population, staff, community members, people aware of/involved with effort, etc. (a representative sample may be sufficient); follow-up of target population

What to look for?

Did we reach the target population?
Was the target population the right population for the information?
What expenses were involved in the strategy?
Was it cost effective?
Was the strategy easy to deliver?
Did we reach or surpass the expected response? Why or why not?
How can the strategy be improved? Should it be used again? Should it be "shelved"? Why?

Incorporate evaluation information into next dissemination plan

Developed by
Jan Novak & Barbara Dougherty
Vocational Studies Center
University of Wisconsin
Madison

WORKSHEET I

ASSESSING AND SELECTING DISSEMINATION/COMMUNICATION STRATEGIES

Directions: List the dissemination and communication strategies you have identified. Then, for each approach, indicate whether the selection criterian is an asset (+) or a limitation (-) to planning/implementing the approach.

Strategies for Dissemination/Communication	Selection Criteria:	Meets Needs of target pop.	Proven Success/Validation	Potential Numbers Served	Cost	Cost Effectiveness	Monies Available	Expertise of Local Staff	Ability to Incorporate Existing Services, Programs, Resources, Etc.	Acceptability of Approach by staff, target pop., community, etc.	Facilities	Ease of Implementation	Staff Requirements	Success of Similar Activities	Other:	Other:	Other:

J. Novak/B. Dougherty
Vocational Studies Center
University of Wisconsin-Madison

WORKSHEET I: ASSESSING AND SELECTING DISSEMINATION/COMMUNICATION STRATEGIES

Strategies for Dissemination/Communication	Selection Criteria:	Meets Needs of target pop.	Proven Success/Validation	Potential Numbers Served	Cost	Cost Effectiveness	Monies Available	Expertise of local Staff	Ability to Incorporate Existing Services, Programs, Resources, Etc.	Acceptability of Approach by staff, target pop., community, etc.	Facilities	Ease of Implementation	Staff Requirements	Success of Similar Activities	Other:	Other:	Other:

[redacted]
Vocational Studies Center
University of Wisconsin-Madison

WORKSHEET II

DISSEMINATION/COMMUNICATION PLAN

Activity/Approach/Strategy _____

Tasks & Sub-Tasks	Time Line	Person(s) Responsible	Resources	Projected Costs	Ways to Evaluate Task

AEL

BUSINESSES ARE PROJECTED TO SPEND NEARLY 4.5 BILLION DOLLARS ON PCs IN 1985...

MANAGEMENT INFORMATION SYSTEMS

Business Graphics

pfs:Graph
Software Publishing Corp.
Comments: Provides a variety of good graphics.
Can get data from pfs:File

Microsoft Chart
Microsoft Corp.
Comments: Contains 45 different types and styles of charts and graphs. Easy to use. Can change data and see effect immediately.

Communications

Data Capture/PC
Southeastern Software
Comments: Allows capture, editing and storing of information received online.

Hayes Smartcom II
Hayes Microcomputer Products
Comments: Does not provide capture and editing. Await call feature. Option to print to printer or disk as info received online.

Database Management

Friday!
Ashton-Tate
Comments: Report program for dBASE II files. Designed to be easy to use but there is a good deal to be learned in order to use it.

pfs:File
Software Publishing Corp.
Comments: Easy to learn and use. Must have pfs:Report in order to use. reports from data. Can find info using search procedures. Limited but good start.

dBASE III
Ashton-Tate
Comments: Requires 256K. Allows more fields, larger files. Memo fields up to 4K. Over 100 fields per record. Unlimited number of records. Program language.

RBASE 4000
Microrim
Comments: Uses formal language instead of lay language in describing fields and other characteristics. Portions can be locked. No programming language.

Database Management

Ultrafile
Continental Software
Comments: Flexible System. Includes computed fields which automatically compute using formula built into field. No programming language.

dBASE II
Ashton-Tate
Comments: Includes a programming language. Flexible indexing, sorting, reporting. Limited to 32 fields and 1000 characters per record. Not locked.

Graphics

V.C.N. Execuvision
Prentice Hall
Comments: Excellent graphics capability. Can draw using each pixel. Includes color, cut and paste, several print options, several font options included.

Integrated

Framework
Ashton-Tate
Comments: Excellent outlining, organizing, includes word processing, database, spreadsheet, and graphics program that can interchange data. Minimum 256K RAM but 512K recommended.

Desq
Quarterdeck
Comments: An integrator that runs programs you already use such as dBASE II, Lotus 1,2,3 and the pfs series. Allows you to boot several programs and place them in windows. Mouse can be used. Requires 1,500,000 bytes of disk space (hard disk). Allows transfer of data among windows--even if programs are not integrated.

Proofing

pfs: Proof
Software Publishing Corp.
Comments: One of the best proofing programs. Must be used with pfs:Write. Guesses what the correct word is. Catches capitals in middle of words.

Proofing

Easywriter II Spelling
Information Unlimited Software
Comments: Can be put on same disk as Easywriter II Master. Can check spellin of a word while in word processing mode. Easy (mark) and (find mark) functions for corrections.

Report Generator

pfs: Report
Software Publishing Corp.
Comments: Allows creation of various kinds of reports from pfs:File data. Provides totals and sub-totals of data.

RBASE Clout
Microrim
Comments: Artificial inquiry language for getting info from RBASE. You can teach program new definitions of terms. New version can be used with other data.

Spreadsheet

Lotus 1,2,3
Lotus Development Corp.
Comments: Very flexible and large. One of the easiest to use but needs some experience and training.

InteCalc
Schuchardt
Comments: 3-Dimensional by including pages as well as rows and columns. cells = 250 x 250 x 250. Very easy to use.

Multiplan
Microsoft

Time & Project Manager

IntePert
Schuchardt
Comments: A project tracking program.

IntePlan (Professional Series)
Schuchardt
Comments: Excellent time and resource management program. Can keep track of individual's time spent on projects and activities. Appointments, meetings, etc. Includes notepad, built-in timer, and small expense record.

Time & Project Manager

Microsoft Project
Microsoft Corporation
Comments: Comprehensive program. Prepares numerous reports on demand. Includes calendar that can be customized. Critical path automatic. Monitor and project.

Word Processing

Easywriter II
Information Unlimited Software
Comments: Good basic word processing. Does not create text files. Spelling program contained on same disk and word or page can be checked immediately.

pfs:Write
Software Publishing Corp.
Comments: A good easy-to-use program. Has some limitations. Programs can be stored as text files for transfer online.

Word (with mouse)
Microsoft

Idea Processor

Draft Prepared By:

C. Todd Strohmenger, Co-Director
Basic Skills Program
Appalachia Educational Laboratory
P. O. Box 1348
Charleston, WV 25325
1-800-624-9120

800 624 9120

THE AEL TECHLINE

The AEL TechLine (a toll-free technology hotline) is a new resource for educators in the Appalachian Region. It provides educators a link to the latest thinking, research, and practice regarding the use of technology in education. AEL supports TechLine with extensive on-line database search capabilities as well as one of the most comprehensive education and technology periodical collections in the Region. TechLine is staffed by personnel experienced in presenting microcomputer workshops and providing technical assistance to both state and local education agencies. TechLine is partially supported by AEL's contract with the National Institute of Education to serve as a Regional Educational Laboratory.

Since educational use of technology is in a period of experimentation, research, and development, TechLine staff strive to maintain a broad perspective rather than champion particular programs or approaches. This perspective allows TechLine staffers to advise objectively educators who are searching for software, hardware, or technical experience.

Technology in education includes such components as computer literacy, computer-assisted instruction (CAI), computer-managed instruction (CMI), management information systems (MIS), computer-related curriculum change, and computer-related school administration and management issues. The complexity of the matter is compounded by the fact that each of the topics listed are unstable because they are relatively new, fast-changing, and controversial. Few educational practitioners have the time to become aware of all of the issues, let alone keep abreast of the latest developments. The AEL TechLine and staff can be a valuable resource to help educators gain on this fast-moving field.

TechLine staff does not have all of the answers. They do know most of the questions and have access to information regarding ways to go about answering those questions. Call TechLine (1-800-624-9120) today and link your school to tomorrow. Be sure to ask for TechLine when you call.

NOTE: West Virginia educators must call 347-0400 and reverse the charges.

EVALUATION CHECK LIST FOR RECORDING PROGRESS TOWARD INDIVIDUALIZATION OF PROGRAMS

			LEVELS 1 2 3
1.0	FOLLOWS ADOPTED INSTRUCTIONAL PRECEPTS FOR INDIVIDUALIZED INSTRUCTION		
1.1	FIXED CONTENT	1.1.1 Approved syllabi on file	■ ■ ■
		1.1.2 Course outline and/or course description on file	■ ■ ■
		1.1.3 Inst. materials consistent with available guidelines and/or models	■ ■ ■
1.2	VARIABLE TIME	1.2.1 Records indicate open entry dates (biannually, quarterly, monthly, weekly, daily)	□ ■ ■
		1.2.2 Records indicate exit upon completion of course requirements (date variances)	□ ■ ■
		1.2.3 Progress charts or other records of student prog. show variable completion dates (of modules, course, instructional units, etc.)	□ ■ ■
1.3	FIXED PROFICIENCY	1.3.1 Ind. and/or bus. data available for developing performance standards	■ ■ ■

		1.3.2 Student performance standards (terminal obj. or comp.) match available ind. and/or business standards	■■■
		1.3.3 Records available indicating history of student performance used to establish proficiency levels.	□□■
		1.3.4 Evidence of advisory committee review of proficiency levels is available.	□■■
		1.3.5 Evaluations of student performance recorded and part of history file.	■■■
1.4	ALTERNATE LEARNING COMPONENTS ARE AVAILABLE	1.4.1 A variety of media is developed for each course.	■■■
		1.4.2 Alternative study methods are identified and employed.	□■■
		1.4.3 Alternative assignments are provided.	□■■
		1.4.4 Enhancements practices and/or work assignments are defined.	□■■
2.0	ESTABLISH CURRICULUM ENTRY PLACEMENT PROCEDURE		
2.1	SELECTION OF EXIT POINT	2.1.1 Curriculum exit points are dev. and validated via SICC and Adv. Comm.	□■■
		2.1.2 Curriculum and prereq. required for each exit point exist.	□■■

		2.1.3 Documented orient. and counseling about exit point by the prog. exist.	
2.2	ARTICULATION/ADVANCED PLACEMENT ESTABLISHED	2.2.1 Comp./perf. test exist for each curriculum seg. for first-sec. quarter.	
		2.2.2 Terminal perf. comp. for each course are established such that transf. credit via comp. can be evaluated without testing.	
2.3	REMEDIATION LEVELS	2.3.1 Functional levels in math, reading, and writing, are ident. for each course text, module or other req. res.	
		2.3.2 Minimal req. levels in reading are established for the first term of enrollment.	
		2.3.3 Remediation of students is prescriptive for each student.	
3.0	CONTENT VALIDITY ESTABLISHED		
3.1	VALID TASK INVENTORY	3.1.1 Task List or Inventory are developed by SICC surveys and are on file for each course or curriculum component.	

		3.1.2 Written evidence exists indic. rev. and valid. of task by advisory committee(s).	
		3.1.3 A comparison of course/module content, outline, and task list. ind. compat.	
		3.1.4 Records show evidence of annual rev. of course content and task list.	
3.2	TASK ANALYSIS COMPLETED	3.2.1 Tasks are analyzed in terms of frequency, importance, and difficulty (indicated on analysis forms) via SICC and Advisory Committee validity.	
		3.2.2 Annual examination of task analysis results show rev. and/or enhancement as app.	
3.3	CONTENT ACCURACY VALIDATED	3.3.1 Instructional materials have had technical revision according to established procedures.	
		3.3.2 Acquired instructional materials are app. current via copyright or reference.	

3.4	CONTENT MATCHES PERFORMANCE OBJECTIVES	3.4.1 Instructional content is closely correlated or matches performance objectives and irrelevant content is minimal to nonexistent.	
		3.4.2 Changes to course objectives correlate to related changes in content.	
4.0	PERFORMANCE OBJECTIVES ESTABLISHED		
4.1	OBJECTIVES ARE STATED IN PERFORMANCE TERMS	4.1.1 Each objective (enabling and terminal) shall state the performance (action) of the student.	
4.2	CRITERION REFERENCED	4.2.1 Measurement criteria and standards are listed for each performance objective (enabling and terminal).	
		4.2.2 The standard is set for each performance objective by the instructor where individual standards don't exist.	
		4.2.3 Performance criteria for terminal objectives are at the job entry level.	

		4.2.4 Conditions of performance testing are consistent from one test cycle to the next.	☐ ☐ ☐
4.3	OBJECTIVES REPRESENT COGNITIVE, PSYCHOMOTOR, AFFECTIVE DOMAINS	4.3.1 The domain(s) for each terminal objective is identified.	☐ ☐ ☐
		4.3.2 Enabling objective domain supports achievement of terminal objective.	☐ ☐ ☐
		4.3.3 Affective domain objectives should be established for each program via Task Inventory of faculty/administration based on employability skills.	☐ ☐ ☐
		4.3.4 Performance testing modified to accommodate testing of handicapped as appropriate.	☐ ☐ ☐
		4.3.5 Affective domain objectives are correlated counseling and the instructional plan.	☐ ☐ ☐

5.0 UTILIZE INDIVIDUALIZED INSTRUCTION METHODOLOGY

5.1	INSTRUCTIONAL MATERIALS ARE INDIVIDUALIZED	5.1.1 Student learning guides or modules are developed for specific tasks from which performance objectives are developed.	☐ ☐ ☐

		5.1.2 Learning guides within given courses or programs follow recommended format or specifications.	☐☐☐
5.2	INDEPENDENT STUDY PROVISIONS EXIST	5.2.1 Records indicate independent progress by students, group learning activities are minimal, short-termed, and represent common need.	☐☐☐
		5.2.2 Student learning activities are seldom dependent on direct instructional supervision or lecture.	☐☐☐
		5.2.3 Students have access to all necessary course/program material during scheduling hours.	☐☐☐
		5.2.4 Equipment ratios assures adequate hands-on activities for each student.	☐☐☐
5.3	INDIVIDUAL SELF-PACING	5.3.1 Students don't follow a set pattern of group activities, progress is self-paced.	☐☐☐
		5.3.2 Records indicate repeat opportunities for achieving mastery performance.	☐☐☐

		5.3.3 Each student may practice skill development for each role of a group activity or component.	☐■■
		5.3.4 Students are informed in advance of time limitations.	☐■■
		5.3.5 Time limits are based on valid criteria.	☐☐■
5.4	VARIABLE SEQUENCING OF ACTIVITY	5.4.1 Hierarchal activities are identified and communicated to students.	☐☐■
		5.4.2 Activities support variable sequences (course map or other graphic aid illustrates course sequence).	☐■■
		5.4.3 Student interest areas are met through optional activities within competencies.	☐☐■
5.5	FEEDBACK CYCLE IS PROVIDED	5.5.1 Students are tested regularly through self-tests and criterion (performance) tests.	☐■■
		5.5.2 Records indicate individual counseling and/or student/instructor conferences.	■☐■
		5.5.3 Records indicate periodic student progress.	☐■■

5.7	PROVISIONS ARE MADE FOR SPECIAL NEEDS	5.7.1 Records indicate handicapped students are enrolled in programs.	☐☐☒
		5.7.2 Limited access doesn't restrict enrollment of handicapped students.	☐☐☒
		5.7.3 Counseling and testing services are provided handicapped students via certified professionals.	☐☐☒
		5.7.4 Programs initiated for learning disabled through cert. prof., i.e., translators.	☐☐☒
6.0	INSTRUCTIONAL MATERIALS MEET PRINTING, PUBLISHING, AND DISTRIBUTION STANDARDS		☐☐☒
6.1	PRINT MATERIAL IS HIGH QUALITY	6.1.1 Cs/ware (printed) is letter quality	☐☐☒
		6.1.2 Cs/ware (printed) approved for distribution is first generation.	☐☐☒
		6.1.3 Printed materials are free of typographical errors.	☐☐☒
		6.1.4 "Paste-up" materials are used only in preliminary copy.	☐☐☒
		6.1.5 B & W photographs used in Cs/ware are printed from "half-tone" process.	☐☐☒

6.2	QUALITY ASSURANCE	6.2.1 Materials under development carry approval signatures.	☐☐■
		6.2.2 Materials under development reflect editorial, grammar, and style comments as well as reading level identification for instructional materials.	☐☐■
		6.2.3 Graphics developed by professionals or are revised by professionals.	☐☐■
		6.2.4 Photographic releases on file.	☐☐■
		6.2.5 Publishers approval filed for external publications.	☐☐■
		6.2.6 Preliminary & draft document carries issue dates.	☐☐■
		6.2.7 Technical content is revised by content expert.	
6.3	PUBLISHING AND DISTRIBUTION MEET ESTABLISHED GUIDELINES		☐☐■
7.0	MEASUREMENT OF STUDENT PROGRESS FOLLOWS PRESCRIBED STANDARDS		
7.1	EVALUATION METHODS SUPPORT INDIVIDUALIZED INSTRUCTION	7.1.1 Pre-post test deltas available as part of module history (performance test).	☐☐■
		7.1.2 Where applicable, pre-post tests are used as indicators of student achievement.	☐■■

		7.1.3 Adequate pre-post test deltas exist where history is required.	☐☐☒
7.2	TEST INSTRUMENTS ARE VALIDATED AND RELIABLE	7.2.1 Test items of instruction are developed from terminal and enabling performance objectives.	☒☒☒
		7.2.2 Performance tests are the prime measure of competency.	☐☒☒
		7.2.3 Test instruments are subject to technical revisions.	☐☐☒
		7.2.4 Test instruments are subject to item analysis.	☐☒☒
7.3	DEVELOPING INSTRUCTIONAL	7.3.1 Test performance tol. levels are established for all terminal and enabling tests and assmts.	☐☐☒
		7.3.2 Mastery testing is developed for all terminal performance assessments and appropriate enabling assessments.	☐☒☒
		7.3.3 Development of instructional evaluation includes valid. and reliability cycles.	☐☐☒
8.0	MANAGEMENT OF INSTRUCTION FOLLOWS PRESCRIBED STANDARDS		
8.1	FACULTY DEPLOYMENT AND ORGANIZATION	8.1.1 Faculty hiring and assignment shall be consistent with the	☒☒☒

Ranking System Guidelines on Faculty assignments and program plan for development.

8.1.2 Faculty should be qualified to teach all courses within a program even though many have specialty areas.

8.1.3 Records indicate professional development of the technical discipline of faculty.

8.1.4 Use of Lab Assistants and other staff shall be to maximize time for student/teacher contact and instructional development.

8.1.5 Each class or student has an assigned Teacher of Record

8.1.6 Prog. org. and management minimizes dup. of expensive equipment to maximize cost efficiency.

8.1.7 A documented plan for program development is on file and followed.

8.2 COMMUNICATIONS AND RECORDS

8.2.1 A definite schedule of faculty and staff meetings is followed (bi-monthly, monthly, weekly).

8.2.2 The class schedule of each student is maintained and available to all program faculty and staff.

8.2.3 Students not making nominal progress are periodically identified to faculty and staff.

8.2.4 Student progress within the curriculum is maintained centrally within the program and available for faculty review.

8.2.5 Credits earned and grades are recorded continuously throughout the term.

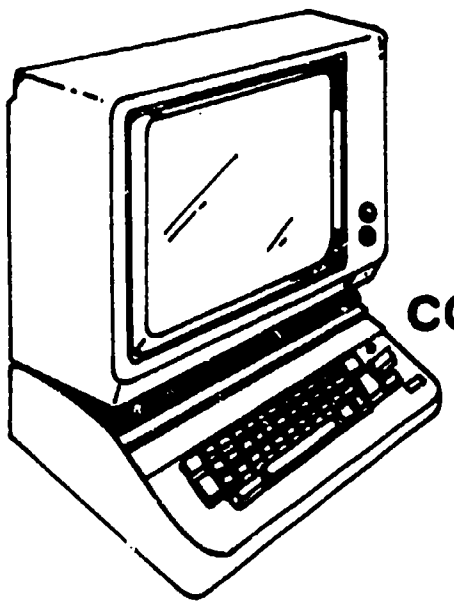
8.2.6 Students historical test results are maintained centrally in the program.

TOTALS

L1

L2

L3



COURSEWARE EVALUATION:

FORM
&
GUIDE

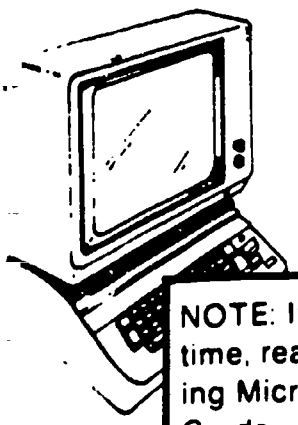
FOR VOCATIONAL AND TECHNICAL EDUCATION

Shirley A. Chase
Ruth Gordon
Richard C. Makin

1984

SPECIAL PUBLICATION NO. 44

THE NATIONAL CENTER
FOR RESEARCH IN VOCATIONAL EDUCATION
THE OHIO STATE UNIVERSITY
1960 KENNY ROAD · COLUMBUS, OHIO 43210



COURSEWARE EVALUATION FORM

NOTE: If you are using this form for the first time, read the instructions in the accompanying Microcomputer Courseware Evaluation Guide

Evaluator _____

Position _____

Date _____

Part A: Courseware Description

In the following sections, record descriptive information about the courseware that you are evaluating.

I. IDENTIFICATION

Program Title _____ Date _____

Series Title _____

Vocational Area(s) _____

Subject Area(s) _____

Topic(s) _____

Developing Agency _____

Street or P.O. Box _____

City _____ State _____ Zip _____ Phone( ) _____

Author(s) _____

Programmer(s) _____

II. HARDWARE REQUIREMENTS

Microcomputer* _____
(brand/model)

K Memory Required _____
(number)

Medium of Transfer (include number of each):

- ___ Tape cassette
- ___ ROM cartridge
- ___ 5¼" Flexible disk
- ___ 8" Flexible disk
- ___ Other _____ (specify)

Programming Language _____ DOS Specifications _____

Other Specifications _____

Peripherals Needed (check all that apply):

- ___ Color monitor
- ___ One disk drive
- ___ Two disk drives
- ___ Plotter
- ___ Game paddle(s)
- ___ Joystick(s)
- ___ Modem
- ___ Mouse
- ___ Printer
- ___ Graphics tablet
- ___ Light pen
- ___ Voice/sound instrument
- ___ Clock
- ___ Video disk
- ___ Touch screen
- ___ Ten-key number pad
- ___ Other _____ (specify)

*NOTE: Provide the above information for any additional hardware on which this program can be used. _____

III. PROGRAM FEATURES (check all that apply)

___ Network version provided
___ Multiple copies required
__ Program can be modified
. Program protected
. Data disk needed
.. Field-test data available

IV. INSTRUCTIONAL SETTING

Program mode (check all that apply):

___ Application
__ Drill and practice
. Educational gaming
.. Simulation
. Tutorial
. Other _____ (specify)

Student Target Population (check all that apply):

___ Regular
___ Disadvantaged
__ Handicapped
__ Limited English
. Bilingual
. Gifted

Grade Level (check all that apply):

__ K-6
___ 7-8
__ 9-10
___ 11-12
. 13-14
_ Adult
Higher Education

Instructional Grouping (check all that apply):

___ Individual
___ Small group (up to 4)
___ Large group (4 or more)
__ competitive interaction
_ cooperative interaction

Prerequisite Student Skills (specify) _____

Accompanying Materials (specify types):

Documentation _____

Student support materials _____

Teacher support materials _____

Correlated materials _____

Estimated Time for Use _____

V. AVAILABILITY

___ Free _____ ___ (copies)
___ Loan _____ (time)
___ Duplication (requestor supplies disk)
___ Sale $_____
___ Rent $_____ _____ (time)

Copyright Restrictions (explain) _____

Back-up Policy (explain) _____

Preview Policy (explain) _____

Update Policy (explain) _____

Contact _____

Street or P.O. Box _____

City _____ State _____ Zip _____ Phone ( ) _____

Part B: Courseware Evaluation Criteria

Indicate the applicability of each section to the courseware being evaluated by checking either "___ A" (applicable) or "___ N/A" (not applicable). If a section is not applicable, proceed to the next section. If a section is applicable, check the column that indicates how well the courseware meets each criterion. Include any comments.

	YES	SOME-WHAT	NO	N/A	COMMENTS
I. SUBJECT MATTER ___ A ___ N/A					
1. Subject matter has educational value.					
2. Student objectives are stated.					
3. Subject matter is accurate.					
4. Subject matter is logically presented.					
5. Subject matter is free of race, ethnic, sex, and other stereotypes.					
6. Subject matter is on the level of the students.					
7. Information and skills presented are comparable to those used in the home, business, or industry.					
8. Subject matter motivates students to learn.					
9. Subject matter is reviewed and summarized.					
10. Program utilizes the unique capabilities of the microcomputer to present the subject matter.					
II. TECHNICAL PRESENTATION ___ A ___ N/A					
1. Program is free of technical problems.					
2. Presentation rate is adequate to maintain interest.					
3. Information on the screen is easy to read.					
4. Program is free of spelling and grammatical errors.					
5. Program instructions are easy to follow.					
6. Color increases the instructional value of the program.					
7. Audio increases the instructional value of the program.					
8. Graphics increase the instructional value of the program.					

	YES	SOME-WHAT	NO	N/A	COMMENTS
III. STUDENT INTERACTION ___ A ___ N/A					
1. Students can use the program with minimal assistance.					
2. Students are actively involved in the program.					
3. Students control the pace of the program.					
4. Students can access the program "menu(s)" to change activities.					
5. Students are permitted to change answers.					
6. Methods of responding correspond to the level of the program.					
7. Students' errors of entry are processed so that the program continues to run.					
8. Students can access available "help" and "hint" options at any time.					
9. Students can enter or exit the program as desired.					
10. Students control the sequence of the program.					
IV. PROGRAM INTERACTION ___ A ___ N/A					
1. Feedback is immediate.					
2. Cues and prompts are provided to assist students in answering correctly.					
3. Feedback reinforces the correct responses.					
4. Feedback is nonthreatening.					
5. Program helps students understand wrong answers.					
6. Program gives the correct answer after a reasonable number of tries.					
7. Positive reinforcement is varied.					
8. Program has the ability to branch/loop depending upon students' performance.					
9. Feedback is on the level of the student.					
V. STUDENT EVALUATION ___ A ___ N/A					
1. Evaluation provides a means for measuring attainment of objectives.					
2. Program reports which items were missed and which were correct.					

	YES	SOME-WHAT	NO	N/A	COMMENTS
V STUDENT EVALUATION—*Continued*					
3. Individual student performance results are available to the teacher.					
4. Class performance results are available to the teacher.					
5. Program provides for printed copies of evaluations.					
6. Test item formats are suited to the material being tested.					
7. Test items are clearly stated.					
8. Test item bank is provided.					
VI. DOCUMENTATION ___ A ___ N/A					
1. Documentation is easy to understand.					
2. Documentation is accurate.					
3. Student objectives are stated.					
4. Underlying concepts are outlined.					
5. Skills to be developed are specified.					
6 Procedures for integrating the program into the curriculum are provided.					
7. Follow-up activities are suggested.					
8. Documentation explains the intended use of support materials.					
9. Sufficient information is provided to operate the program.					
VII. WORK BEHAVIORS ___ A ___ N/A					
1. Program helps students identify their vocational skills.					
2. Program promotes pride in work.					
3. Program promotes productivity.					
4. Program encourages good work habits.					
5. Problem solving is encouraged.					
6. Program promotes good human relations skills.					
7. Program provides an opportunity for work satisfaction and self-fulfillment.					
8. Program encourages creativity.					

	YES	SOME-WHAT	NO	N/A	COMMENTS
VIII. APPLICATION PROGRAMS ___ A ___ N/A (to be completed for application programs only)					
1. Program is adaptable to the needs of the student.					
2. Commands are easily remembered.					
3. Information is easily manipulated.					
4. Corrections are easy to make.					
5. Program includes all necessary variables.					
6. Program performs reliably.					
7. Program efficiently achieves its intended purpose.					
8. Trial data are supplied for learning to run the program.					
9. Program provides for use of printer when hard copy of information is advantageous.					
10. Program moves from operation to operation efficiently.					
11. Program is compatible with other application programs.					
12. Program has a supplementary tutorial program available.					

Part C: Courseware Evaluation Summary

1. SUMMARY COMMENTS

Identify strengths of the courseware:

Identify weaknesses of the courseware:

Describe uses of the courseware in an instructional setting:

2. SUMMARY OF SECTION

Rate the quality of the courseware for each applicable section of this form by checking the appropriate column; if not applicable, check N/A.

	YES	SOME-WHAT	NO	N/A
I. SUBJECT MATTER: Content has educational value.				
II. TECHNICAL PRESENTATION: Program is free of malfunctions.				
III. STUDENT INTERACTION: Students are actively involved with the program.				
IV. PROGRAM INTERACTION: Feedback is effectively employed.				
V. STUDENT EVALUATION: Evaluation adequately measures student progress.				
VI. DOCUMENTATION: Documentation is sufficient to run the program.				
VII. WORK BEHAVIORS: Program assists students in developing positive work attitudes and skills.				
VIII. APPLICATION PROGRAMS: Program performs the task for which it is intended.				

3. FINAL RECOMMENDATION

Check your recommendation for the courseware and explain your reasons below.

___ Highly recommend
___ Recommend
___ Recommend with reservations
___ Do not recommend

_____

_____

INTEGRATION OF COURSEWARE INTO CURRICULUM *

1. Identify courseware objectives.

2. Compare courseware objectives with curriculum goals and decide if there is a match.

3. Evaluate courseware to determine if it meets student needs.

4. Develop plans and procedures for courseware use.

    a. Fit courseware into the sequence of curriculum plan.

    b. Identify type of instructional activity (e.g., supplemental, alternative learning method, make-up).

    c. Identify grouping arrangements (individual or group use).

    d. Develop pre-activities (e.g., introduction, instruction for prerequisite skills).

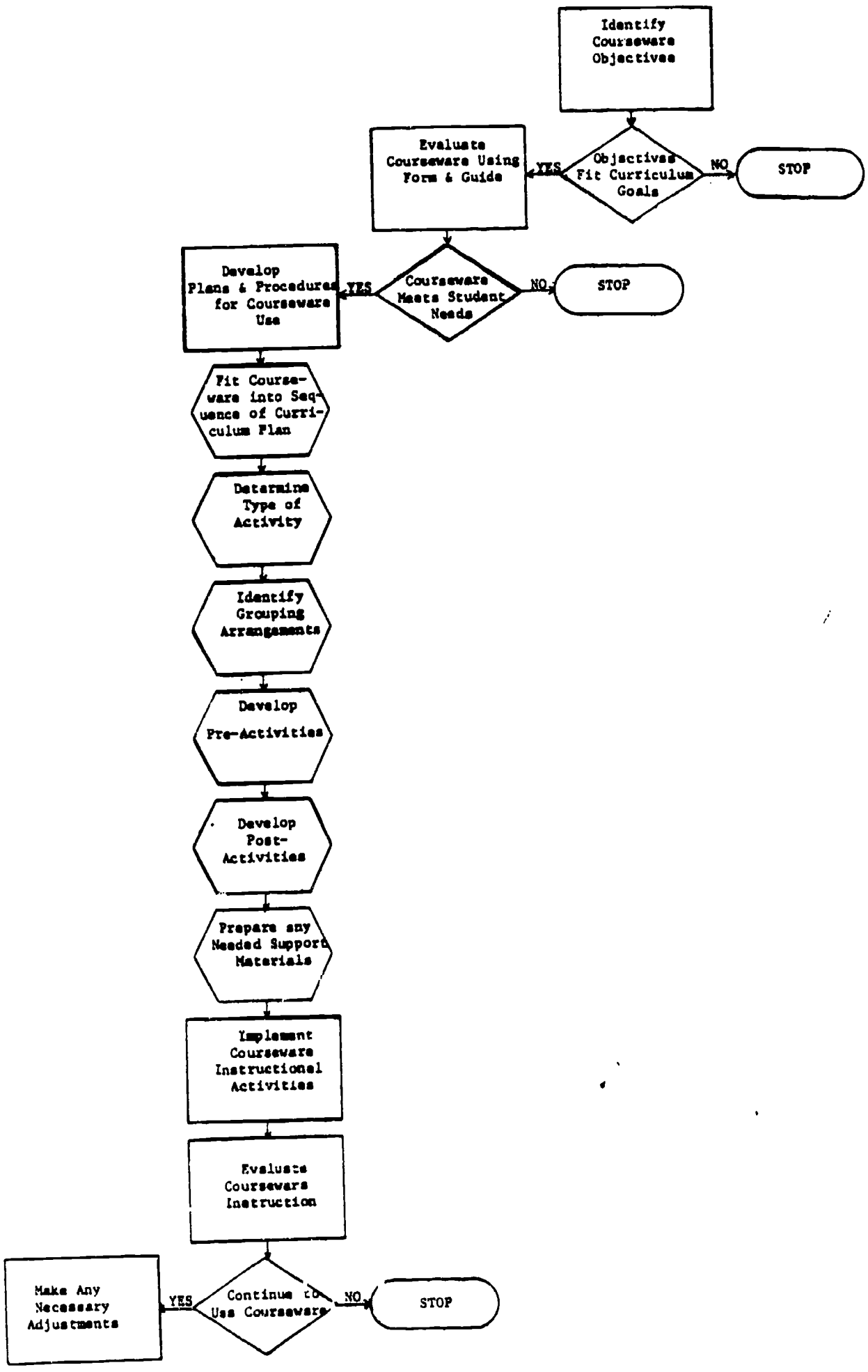
    e. Develop post-activities (e.g., summary, follow-up and review, student evaluation).

    f. Develop supplemental student materials for courseware use (e.g., modules, student instruction sheets).

5. Implement student use of the courseware and supplemental activities.

6. Evaluate the effectiveness of the instruction and decide whether to continue use of the courseware. If so, make any necessary adjustments to improve the instruction.

* Developed by Shirley A. Chase, Ph.D., Research Specialist, National Center for Research in Vocational Education, 1960 Kenny Road, Columbus, Ohio 43210, (614) 486-3655 or (800) 848-4815


Identify Courseware Objectives
Objectives Fit Curriculum Goals
YES
NO
STOP
Evaluate Courseware Using Form & Guide
Courseware Meets Student Needs
YES
NO
STOP
Develop Plans & Procedures for Courseware Use
Fit Course-ware into Sequence of Curri-culum Plan
Determine Type of Activity
Identify Grouping Arrangements
Develop Pre-Activities
Develop Post-Activities
Prepare any Needed Support Materials
Implement Courseware Instructional Activities
Evaluate Courseware Instruction
Continue to Use Courseware
YES
NO
STOP
Make Any Necessary Adjustments

TAILOR MADE STRATEGIES OF DISSEMINATION:

THE STORY AND THEORY CONNECTION

By

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This paper was prepared for the Seventh Nationwide Vocational Education Dissemination Conference of the National Center for Research in Vocational Education, The Ohio State University, Columbus, Ohio, November 13-15, 1984.

TAILOR MADE STRATEGIES OF DISSEMINATION[1]:

THE STORY AND THEORY CONNECTION

By H.S. Bhola

A story from India goes like this: As ill luck would have it, a poor farmer died a sudden and untimely death, leaving behind a helpless widow and a young son. As soon as the farmer's widow came out of mourning, she took he .on aside and spoke to him thus:

"My poor little boy! Your father has left this world for ever. He will never come back to us to show his love or his care. Our eyes are tearful and our hearts are sorrowful. But our stomachs are empty. There is nothing much in the house to eat. Tender as you are in years, you must go to work so that we can eat and stay alive."

The mother then told the son to go to the rich farmer who lived in the next village and to ask him for work. As the boy was about to leave, she gave him a burlap sack and said:"What the farmer gives you for your labor at the end of the day, put it safely in this sack and carefully bring it home."

The little boy went to see the rich farmer in the next village. He told the farmer of the misfortune that had befallen him and his mother

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[1]The word "dissemination" has been retained for use in this paper to conform to the Conference documentation. Our own preference is for the phrase "planned change" which is seen to cover all planned change events and processes such as innovation diffusion, dissemination, knowledge utilization, organization development, institution building, community development, technology transfer and technical assistance. The word "innovation" has been used interchangeably with "objectives of change" in the body of this paper.

and asked for work. The rich farmer was touched by the little boy's plight and gladly gave him work. At the end of the day, the farmer rewarded the boy with a pot of honey for his day's labor.

The boy had remembered too well his mother's instructions about putting in the sack whatever he got and carefully bringing it home. He poured the pot of honey into the burlap sack and began his long walk home. Needless to say, most of the honey oozed out of the burlap sack and was lost on the way. Both mother and son were full of sorrow that night.

On the next day, the mother gave her son a bottle and said:"What the farmer gives you for your labor at the end of the day, put it safely in this bottle and carefully bring it home." That evening, the farmer gave the boy a dozen eggs for his labor. The boy remembered his mother's instructions too well. He sat by himself on the edge of the field and tried dutifully to put the eggs, one by one, into the bottle. In so doing, he broke them all for the bottle had a narrow neck. Once again, that evening, there wasn't much left to take home to his mother.

On the third day, the mother gave the boy a grass basket and said: "What the farmer gives you for your labor at the end of the day, put it safely in this basket and carefully bring it home." On this third evening, the farmer gave the boy some corn flour. The boy remembered his mother's instructions too well and he put the corn flour in the loosely knit grass basket that his mother had given him that morning. Most of the flour fell out of the basket and there wasn't much flour left in the basket by the time the boy reached home. The mother did not bake much bread that evening.

As the story is told, the farmer's widow and her son did learn their lesson in the end.

But does the story have lessons for disseminators? We suggest that it does:

First, the point can be made that story and theory are connected to each other; they lie on the two ends of the same continuum. Story structures human experience for easy communication, inter-generationally and intra-generationally. Theory does exactly the same for precisely the same purpose. The structure of the story accommodates richness of detail and is suffused with emotion. The theory, however, is a story about stories. It structures at a higher level the experiences that have already been structured by many stories. Theory sheds details of particular situations as it abstracts and generalizes. The structure of theory lacks emotion but compensates with richer understandings. The pre-literate man told stories. The industrial and post-industrial man as also learned to tell theories. Indeed, the modern man finds theory to be the most practical thing in finding and making the world.

A second point can be made by expanding upon the usefulness of theory. In the story just told, the bad fate of the farmer's widow and her young son was made worse by the lack of good theory that could have helped the widow in giving open-ended instructions, and could have helped her son in inventing tailor made solutions. What the mother needed badly was a good "model of container selection" based, in turn, on a taxonomy of commodities and their properties. What the son needed, in addition, was the ability to <u>think with</u> the model of containers and to solve his "pack to carry" problems as they arose unexpectedly each day.

The third use of the story is substantive. The story teaches us, for example, that we should not invent solutions independently of problems

and that choices of strategies once made should not become sacrosanct. More importantly, we should have available to us models and taxonomies that enable us to anticipate a whole range of possible problems and to invent solutions and strategies specific to our particular situation.

To say all that needs to be said about tailor made strategies through stories will need lot of story-telling. It might be enjoyable but will not be economical in terms of time and effort. On the other hand, theory-telling while efficient, is not great fun. In fact, theory is sometimes rejected for being abstract and esoteric even before it is fully heard. And yet, we do wish to present the CLER model (Bhola, 1982), a model of planned change most suited to describing and analyzing change situations and settings and to developing tailor made dissemination strategies.

The course chosen in the following is this: A beginning is made in the middle of the story-theory continuum. Ideas on tailor made strategies of dissemination are presented first as a set of general principles. These principles are rooted, of course, in the CLER model, but are presented without too much theoretical self-consciousness. It is only after the presentation of these general principles that the CLER model itself is presented in its barest essential form. Those who are presently not much intrigued with models may want to stop with the study of the general principles stated below. On the other hand, those who fancy models and theories may want to proceed with their examination of the CLER model.

Some General Principles of Planning Change Strategies

Some general principles of planning tailor made change strategies are described below. Most of these principles arise directly from

the CLER model, but some are generated from the value assumptions in which the model is embedded:

Change requires commitment

Change, whether it is generated from the inside or is promoted from the outside, can not be lead by the uninvolved or the mildly interested. Change requires personal commitment and social awareness. There are, of course, rewards and satisfactions for the change agent, but such rewards and satisfactions are not easily won. Change agentry demands long hours of work and sacrifice of leisure.

Planning and management of change requires knowledge

Three types of knowledge are needed (Bhola, 1984) for the planning and management of change: Knowledge of "How the world works"; Knowledge of "How a particular sector of interest works"; and Knowledge of "How the change process works".

Making change for ourselves by ourselves, or promoting change for others, requires knowledge, but change need not be the monopoly of the expert. To make change to seek renewal is our right and our obligation. Also, most professional educators already have knowledge enough to take the initial steps in planning and implementing change. What we do need to do is not to be satisfied with what we already know but to continue learning about change agentry and change processes. To do so we need to reflect on our own personal experiences to systematize our tacit knowledge into usable knowledge; we need to read in the social and behavioral sciences to increase our understanding of social processes and to improve our repertoire of social and behavioral technology; we need to get consultant help to bring us the knowledge that we do need but do not seem to have; and, most, importantly, we need to learn to think and

act together through participative planning, participative implementation and participative evaluation of change.

An invitation to change should be an invitation to total system renewal

Change whether generated from within or offered from the outside should not be merely additive. It should be used as an invitation to total system renewal involving a fresh examination of the calculus of means and ends employed by an institution. All invitations to change should provide an opportunity to ask questions about the system's objectives and the system's choice of strategies for attaining those objectives.

A change planner must think systems and dialectics

A change planner must have a systems view of the world. This means that the change planner must be able to see various social elements and entities of concern as existing in a connected and overlapping network of mutual interdependences.

A change planner must, at the same time, think dialectically. He must understand that things and processes are often neither primary nor secondary, but acquire their definitions only in terms of each other; and that these definitions are tentative and in continuous redefinition. Additionally, he must understand that social change is a dialectical process in yet another sense: actors in the change process are pulled in different directions, as they respond to their norms and to counternorms at the same time; and planned change interventions create effects that are both apposite and opposite.

Clearly, this means that the change agent must work with models that accommodate system thinking and dialectical thinking, in terms of

being able to include the context, the complexity and the continuity of planned change.

Change planner should consider the whole ensemble of the changer, the change and the changed

Change is a transaction between and among the various stakeholders around a change objective. The change maker must, therefore, think in terms of the whole ensemble of the planner system (P), the objective of change (O), and the adopter system (A). The planner system need not always be an outsider, apart from the adopter system. Indeed, the planner system can be a subsystem of the adopter system, and, thus, an integral part of the adopter system. Or, the planner system and the adopter system may be the same one social entity, but playing two different roles--alternatively as the change maker and as the change adopter.

The three parts of the ensemble -- P,O, and A --should be seen to exist in a relationship of mutual definition as each effects and is effected by the other. The initial objectives will define the boundaries of both the planner system and the adopter system. The particular configurations of the planner system and the adopter system and their resources may, in turn, demand a redefinition of initial objectives.

Change is often defined in the process of implementation

The ensemble P,O, and A suggested above includes the change objective (O). The change objective (O) may be well defined and packaged as an innovation or it may be a somewhat ambiguous change objective. In the latter case, the change objective will need to be defined in the very process of its implementation. While subjective expressions of a problematic situation will exist among the various stakeholders within and outside an institutional setting, the problem may be far from being

well understood. Even when formal statements of the problem have been attempted, these may not be statements of the real problem. Indeed, there may be deliberate or unconscious attempts at problem avoidance.

After a more or less satisfactory definition of objectives has been obtained, the innovation or the change objective should be unpacked: it should be described both in technical terms and in terms of social implications. It must be understood that the incorporation of a packaged innovation or the implementation of a change objective is never a merely technical matter. It is always a combination of the technical and the social or structural.

Adaptations of an innovation or a set of educational objectives are generally possible without a loss of the integrity of the innovation or of change objectives. There is always some elasticity in the definition of ends as well as in the choice of means -- of course, within limits. It is important that the change agent considers possibilities of adaptations of innovations and objectives and develops a clear interval of acceptance for adaptation without loss of integrity.

In planned change description must precede prescription

Good descriptions are always pregnant with predictions and, therefore, with prescriptions. The most important part of planning change is developing good descriptions of change-relevant systems. Such descriptions must cover all the necessary aspects, each in sufficient detail. The following four aspects must be covered: configurations, linkages, environments, and resources.

Configurations (C). What are the actors interested in making change; and what are the actors who would be effected by such change? What individuals, what groups, what institutions, what communities and subcultures will be involved as stakeholders? How are these various

stakeholders, on both sides of the change equation, related to each other in social, economic, political and bureaucratic networks? Finally, how is the change agent as one individual or as one functionary in a larger planner system related to others in the planner system and to the adopter system?

Linkages (L). Without linkage neither information can be communicated nor influence can be brought to bear on each other. As part of developing descriptions of change-relevant systems, questions should be asked if linkages exist between the planner system and the adopter system. We must also examine if linkages exist within the planner system and within the adopter system.

Environments (E). As part of the descriptions of the planner system and the adopter system, a note should be made of environments that surround the change transaction. It should be remembered that the planner system and the adopter system may not be responding to the same environment but to different ones at different times; and that those environments may have the quality of being supportive, neutral or inhibitive of the change effort.

Resources (R). What are the resources available to the planner system to promote change? Does the planner system have the whole range of resources (conceptual, influence, material, personnel, institutional, and time) that might be needed for the promotion of change? Does the adopter system have the types of resources and at the levels needed by it for incorporating the change in question?

As was mentioned earlier, in developing definitions of change objectives and descriptions of change-relevant systems, change objectives themselves will undergo redefinition and the boundaries of the change-relevant

system will expand or contract. In some cases, the overlap between the planner system and the adopter system will be deliberately increased to suit our values in regard to the need for participative planning, and participative implementation of change.

Descriptions of change-relevant systems should be tested in the real world

Descriptions of the planner system and the adopter system should be validated through reality testing in the real context of change. Description is a multi-layered process. It starts with an initial attempt at ordering various individuals, groups, institutions and communities that seem to be involved in the change transaction into a network of relationships -- formal and informal. This is done through a mix of intuition and formal knowledge. At the second level of description, the social entities constituting the planner system and the adopter system are typified and categorized to build a set of expectations about their normal behavior and their future behavior under different possible interventions. Finally, at a third level, initial descriptions are tested in the real context of change and revised as they are validated.

Strategic prescriptions should arise from tested descriptions

As has been indicated above, there is nothing more potent than a good description. Tailor made strategies should arise from definitions of innovations and objectives and descriptions of change-relevant systems. It is such definitions and descriptions that will suggest where change interventions might be made: whether changes are called for in configurations and configurational relationships; or in linkages within and between them; or in their response patterns to surrounding environments; or in the

deployment of resources; or in two or more of these aspects in synergetic combination.

A few further points may be made in regard to the design of strategies:

1. The change agent does not operate in the best of all worlds. What should be changed in an ideal sense may not always be amenable to change. In real world settings, in real time, the change agent may have to be satisfied with what is possible and not be able to do what seems ideally necessary.

2. Different change strategies may have to be used for achieving the same one change objective in different settings: training and staff development may be implemented in one setting; adhocratic organization may be introduced in another setting.

3. Different strategies may be used during different phases of the same change episode: institution building may be implemented in the first phase, organization development in the second phase, and instructional development in the last phase.

Power is the essence of all strategy

By definition, the ability to change means the ability to control. Control is effected through the exercise of power. Power need not be brute power. There are other more acceptable currencies of power: the power of knowledge, the power of persuasion, and the power to offer or withhold rewards. Our norms and values should help us in choosing morally and socially acceptable currencies of power in the exercise of power as we design change strategies. Sometimes, the power of the adopter system or of competitive systems will be deliberately encouraged to come into play because of our particular belief systems.

Planned change is a continuing experiment

Planned change is not a linear process with pre-determined outputs and outcomes. Planned change is an experiment in and on our world of work and life. The problem of change is never fully and finally solved: the old problem changes into a different problem requiring new commitments and new interventions. Thus, planned change is a continuous experiment. Each strategic intervention in the P,O, and A ensemble, creates a new P,O, and A ensemble demanding a new intervention. The process goes on.

CLER -- A Systemic and Dialectical Model of Innovation Diffusion and Planned Change

As was indicated, the principles of planned change presented above are rooted in a theoretical model: the CLER model. The CLER model suggests that innovation diffusion or planned change is a function of four variables:

Configurations and configurational relationships brought into being by the change transaction between the planner system and the adopter system;

Linkages within each of the planner system and the adopter system and between the planner system and the adopter system;

Environments surrounding the planner system and the adopter system; and

Resources available to the planner system to promote change and to the adopter system to incorporate that change.

The CLER model suggests that the probability of occurrence of a change event can be increased through a synergetic optimization of these four variables. (Please note that optimization is not necessarily maximization.)

The conceptualization of the planner system and the adopter system does not necessarily suggest two separate social entities, but does suggest two separate social roles. Thus, the planner system need not always be an outsider imposing change on an adopter system. The two systems may be in a state overlap,suggesting participative change; or the two systems may be fully congruent, suggesting one system in two roles of the planner and the adopter, in other words, a system engaged in self-renewal.

The innovation or the objective of change is seen to have a dialectical relationship with the planner system and the adopter system. Each innovation, it is asserted, will influence the definition of the boundaries of the planner system and the adopter system. In turn, the planner system and the adopter system will stipulate adaptations of the innovation initially offered. Thus, the following ensemble:

(Planner System) X (Change Objective) X (Adopter System)

or (P) X (O) X (A).

The CLER model suggests that the planner system and the adopter system should be described in terms of C,L,E and R, thus giving us the following version of the change ensemble:

$(CLER_p)$ X (O) X $(CLER_a)$.

Four different social configurations have been identified by the CLER model: Individuals (I), Groups (G), Institutions or organizations (IS), and Cultures, subcultures or communities (CL). Each of the four can act in the planner role as well as in the adopter role, thereby giving us sixteen possible configurational relationships as follows:

	CHANGE ADOPTERS			
I-I	I-G	I-IS	I-CL	CHANGE PLANNERS
G-I	G-G	G-IS	G-CL	
IS-I	IS-G	IS-IS	IS-CL	
CL-I	CL-G	CL-IS	CL-CL	

These configurational relationships are used to develop configurational maps for the planner system and the adopter system.

Linkages have been defined in the CLER model as linkages between (L_b) the planner system and the adopter system; and linkages within (L_w) each of the planner system and the adopter system. Linkages will also be either formal or informal. As part of the description of the planner system and the adopter system, the configurational maps developed above will be supplemented by what can be called linkage-typing.

Descriptions of P and A will also take in view the environments in which they are placed. The P and A in a planned change ensemble will not necessarily be responding to the same one environment. The quality of the environment may be inhibitive, neutral or supportive.

Finally, descriptions of P and A must take cognizance of resources which are of six kinds: conceptual resources, resources of influence and goodwill, material resources, personnel resources, institutional resources and time resources. Both the planner system and the adopter system need resources. The planner system needs resources to promote change and the adopter system needs resources to incorporate change.

The (O) in the (P) X (O) X (A) ensemble, also needs definition. The innovation or objective of change should be described as a socio-technical entity, describing its technology as well as the social correlates

of the technology involved. Suitable intervals of acceptance should be established within which adaptations of the means and ends calculus of the innovation will be considered acceptable.

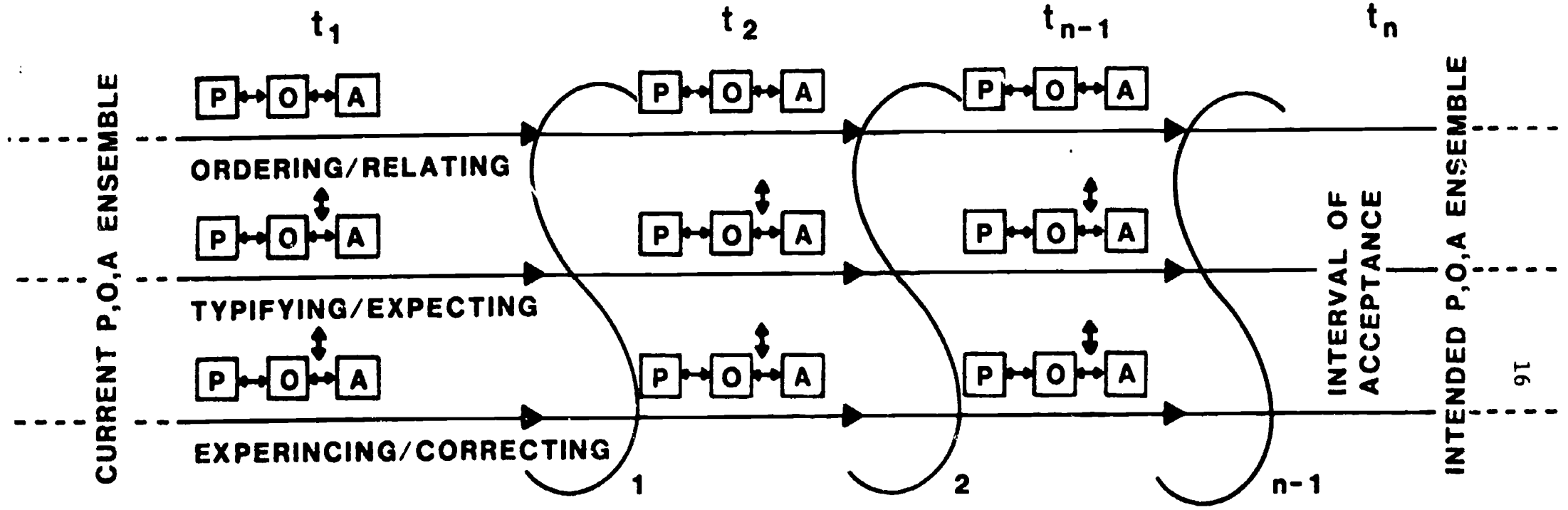
The grammar of planned actions

As just described, the initial task in the planning of change is to conceptualize P,O and A as existing in a dialectical relationship and to describe the three entities in the ensemble. The process of description, we now suggest, is a multi-layered process involving ordering/relating, typifying/expecting and experiencing/correcting. (See figure on next page.)

Ordering/Relating. Reality is socially constructed. Ordering/relating involves making an initial picture of this reality. We impose a structure on our world, carving out convenient boundaries for the planner and adopter systems. We structure subsystems within systems to examine relationships and overlaps. Some temporal order is imposed as purposes and causes are assigned. Both facts and values are involved in this process of ordering and relating.

Typifying/Expecting. Once the reality surrounding the change agent has been ordered as well as the change agent's relationship with and within this ordered reality, then, the process of typifying and expecting begins. The various social entities, social processes and environments are typified as belonging to certain classes and categories. Expectations are built in regard to their possible future behavior under change. This is what makes change an experiment rather than a linear and deterministic action.

Experiencing/Correcting. During the process of experiencing and correcting, models and structures on the one hand, and typifications and expectations on the other hand, are reality-tested. Descriptions initially developed are now validated.



PLANNED CHANGE AS A CONTINUOUS DIALECTICAL PROCESS

P is the planner system
O is the change objective
A is the client system
S is the situation-specific strategy

Strategizing for change

The three interrelated processes described above would give the change planner a description of the social reality and an opportunity to validate such a description. In the very description of the P,O, and A ensemble, the planner of change will find nodes for intervention in the system. The description might suggest that the initial change objective needs revision. Or, the description may suggest changes in C,L,E, or R aspects of the system or in two or more of these aspects in a synergetic relationship. This is what will provide the change planner with a tailor made situation specific strategy, S_1. (See the figure on the previous page).

It is important to point out that the CLER model in suggesting situation specific strategies is not claiming that each planned change situation is "a universe of one" and, therefore, so unique that no experience is transferable to it from other situations. What we do mean to suggest, however, is that the change planner should begin within the context, and develop description of the P,O, and A ensemble before looking for solutions. A good description will indeed compel the choice of particular solutions. Some of those solutions will be in the repertoire of the change agent. Some others will have to be brought in from the outside.

The graphic presentation of the CLER model in the dialectical mode also shows that the first strategic intervention S_1 may by no means be the last one in a change episode. Intervention S_1 may create a new ensemble of P,O, and A, requiring a new strategic intervention S_2 down the line. The process will be iterative.

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BUILDING LOCAL CONSENSUS FOR VOCATIONAL EDUCATION

A session prepared for

The Seventh Nationwide Vocational Education Dissemination Conference:

Excellence for the Information Age

Columbus, Ohio

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This material was prepared for use in this session by Carolyn Davis Luzader. It has been summarized and condensed, as contrasted to the complete "training session." To actually conduct a goal-setting conference (using the DAP process), approximately 1½ - 2 days of intensive training is required. Only highlights of the eight major activities that make up a conference are included here; the complete conference manual is approximately 30 pages. This summarized material and condensed training session are not intended to take the place of the formal training and full versions of the materials required to conduct a goal-setting conference. For further information on the AEL Needs Assessment process, please contact:

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AEL to Assess Educational R & D Needs

The Appalachia Educational Laboratory (AEL) is conducting a major assessment of educational needs in its seven member states. The study will produce well-documented statements of research and development needs specific to each state, as well as the agenda for AEL's R & D work. These results will be useful to both AEL and the individual states for establishing research and development priorities in education. Primary support for the study is being provided by the National Institute of Education (NIE).

Needs assessments are not new to the Laboratory. AEL is a non-profit corporation created and controlled by educators of its member states. Its function is to provide the states, separately and collectively, a specialized research and development approach for meeting the verified educational needs of the Region. However, the 1980 assessment differs from previous AEL needs studies. In the current project, AEL staff will work with states to translate identified *educational needs* into statements about *R & D needs* that states can use, independent from AEL, as a basis for decisions about educational R & D planning.

MAJOR EVENTS:

Several major events will occur between February and September 1980. Conferences will be convened in each of the seven member states. Through a structured process, participants will develop a list of state *educational needs*. These lists, combined with educational needs identified by AEL staff members in the course of their work, will be submitted to a larger sample of each state's population for validation. The lists of validated *educational needs* will be translated into *R & D needs* through interactions by Laboratory staff with the Chief State School Officer, department of education personnel, and AEL Board members in the individual states. The R & D needs statements may then be used by states (1) to select short-term R & D service projects to be conducted with AEL, and (2) to identify potential R & D projects that can be conducted using other means of support.

Needs information produced by member states also will guide AEL's long-term R & D planning. A committee of AEL Board members and an NIE representative will be charged with recommending to the Laboratory's Executive Board alternate long-term, programmatic R & D agendas. Major information sources to be used by the committee in its decision-making are a multi-state/regional needs matrix, developed from the seven lists of state-specific educational needs; each state's R & D needs statements; and a set of specially prepared scholarly papers.

The AEL Executive Board will receive the committee's report and select one long-term, programmatic R & D agenda that will guide AEL's work during the next decade. The long-term agenda will include work recommended for support under AEL's institutional agreement with NIE, as well as work recommended for support by other funding sources.

SPECIAL FEATURES:

The 1980 needs assessment contains several special features:

- **Equitable representation in selection of conference participants.** Since initial identification of each state's educational needs will occur at the individual conferences, an equitable balance of participants will be selected to represent a broad array of agencies and organizations.

- **Validation of needs by a larger sample of state's residents.** A larger sample of people representing the same groups attending the conferences will be used to verify identified educational needs.

- **Commissioned papers to give in-depth perspectives.** Educational scholars will be commissioned to prepare papers that will refine and expand information about the Region's most prevalent needs.

ANTICIPATED RESULTS:

The results of the needs assessment have high potential for positive impact on education in the Region. Information resulting from the study will be useful to the member states as well as to the Laboratory for making decisions about educational R & D priorities.

Three particular results may have immediate impact:

- the listings of each state's most critical R & D needs,
- the identification of state department/AEL R & D service projects, and
- the determination of AEL's long-term, programmatic R & D agenda.

FUTURE PLANS:

Since educational needs, and therefore R & D needs, are dynamic, AEL will implement a major needs assessment every three years. Through systematic repetition, the Laboratory can adjust its response to regional needs, both in terms of short-term R & D services and long-term, programmatic R & D work. In addition, AEL can assist member states in appropriately redirecting their R & D focus as some needs are met and new needs emerge.

MORE INFORMATION:

A flowchart outlining the progression of the needs assessment and a document describing the design of the project are available from the Laboratory. To obtain these or other information about AEL's 1980 needs assessment, call or write:

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DAP: CONCEPTUAL FRAMEWORK FOR THE APPALACHIA EDUCATIONAL LABORATORY'S NEEDS ASSESSMENT PROJECT *

From Aristotle to Dewey to Churchman, problem solving has been the essential element in individual growth and effective group functioning. Despite the volumes of rhetoric devoted to the topic, however, groups continue to countenance difficulties in their attempts to define and solve the problems facing them. Consistently, problems tend to be defined more in terms of prescriptions for action than as discrepancies between actual and desired states of affairs. Commonly, groups spend more time dealing with difficulties encountered in how they function than with the topics that brought them together, frequently without recognizing that those are separate issues.

DAP is the acronym for a set of concepts and procedures that the members of any group can employ to refine their problem solving skills and bring them to bear on real-life, day-to-day group needs. Based upon a particular view of human beings, communication, and the process of inquiry, DAP involves the members of a group in generating and using three kinds of information: *designative* information (D) about the "what is" state of some one or some thing; comparable *appraisive* information (A) about "what is preferred;" and *prescriptive* information (P) that suggests what to do when discrepancies can be identified between "what is" and "what is preferred."

As group members generate and use these three kinds of information, they move systematically through three different phases of the problem solving process. They begin by identifying their individual and common problems clearly and specifically. They then develop plans or prescriptions for dealing with the most critical of those common problems. And they complete the cycle of problem solving by implementing their plans, monitoring effects, and evaluating their success as joint problem solving systems.

Two relatively simple, but terribly powerful conceptualizations undergird the DAP approach to identifying and resolving problems or needs within groups. One of these provides us with a way of thinking clearly about needs, needs assessment, and need fulfillment. The other provides us with a way of thinking about communication within and across groups.

How we think about needs or problems takes its cues from C. S. Morris, a communication theorist who has helped us distinguish clearly among designative inquiry, appraisive inquiry, and prescriptive inquiry--the source of DAP. To be more specific:

- When any of us tries to identify "what was, is, or will be" with respect to ourselves, others, or the world out there, we're engaged in *designative inquiry* and the product of our efforts is *designative information*. "Yesterday was Sunday." "It's now after 2:00 p.m." "Tomorrow I will be in Chicago." "Fall is certainly beautiful in the Appalachians." "It is 80° in this room." All of these statements provide designative information, for they attempt to describe what was, what is, or what will be.

- By contrast, when we identify our preferences or desires for the past, present, or future, we're engaged in a very different kind of inquiry, for our words become value-laden, and they describe, not "what is," but, rather, "what is preferred." We call this second kind of effort *appraisive inquiry* and the information it produces *appraisive information*. For instance, "I have always preferred ice cream to pie." "My desire is to be an educator." "I wish that it was 70° in this room." These are appraisive statements.

- Now, needs or problems arise when there is a clear discrepancy or mismatch between "what is" and "what is preferred," between the designative and appraisive information we have about some common referent. "Johnny reads two levels below grade level; we prefer him to read at least at grade level." "It is 80 degrees in this room; I prefer it to be 70 degrees." These are statements of need.

- To complete the cycle, there is yet a third kind of inquiry and resulting information that we call *prescriptive inquiry* and *prescriptive information*. As the words suggest, prescriptive inquiry attempts to identify specific actions, plans, strategies, tactics, and so forth that, if implemented, will reduce known discrepancies between "what is" and "what is preferred." Sometimes, prescriptions are designed to change "what is"--the designative state. "Turn on the air conditioner to reduce the temperature from 80° to 70°." Other times, they are designed to change "what is preferred"--the appraisive state. Either way, however, they take their cues from clearly identified needs that have been defined in terms of "what is" and "what is preferred."

*Adapted from

Nagle, John M. Two conceptualizations that undergird the 1980 Needs Assessment Project of the Appalachia Educational Laboratory. Paper presentation at the annual AEL Conference on Improving Education through Research and Development. Charleston, West Virginia, October 1980.

Nagle, John M. and James H. Balderson. Group problem solving: The DAP approach. Final Project Report. Center for Educational Policy and Management. Eugene, Oregon, March 1974.

In AEL's Needs Assessment Project, there were two specific influences of this particular conceptualization of needs and needs assessment:

- First, in our effort to distinguish clearly throughout the project between identifying needs on the one hand and, on the other, developing plans to meet those needs. Throughout the project, we have tried assiduously not to mix these two related, but very different kinds of activities.

- And second, in our effort to state needs in terms of clear discrepancies between "what is" and "what is preferred." Whether stated by participants in State Conferences, sent to others for validation, shared with state departments, or used by AEL's Board and staff to prepare long-term R and D agendas, the educational needs that provided grist for the project were consistently framed in terms of parallel descriptions of what is and what is preferred with respect to some referent.

The second conceptualization that undergirds DAP has to do with levels of communicative contact among human beings. It influenced, rather subtly, the sequence of activities that comprised the Needs Assessment Project. Think for a moment about what happens when you communicate with others, and see if these five levels of communication contact are in evidence:

Level One: Fidelity

That is, when I give a message to someone else, can he or she replicate it faithfully. Sometimes, fidelity of contact is all I want (e.g., reserving a flight to Charleston when I know precisely the flight I want); more likely, however, fidelity is just the first step, but a very necessary one, in my efforts to communicate with others.

Level Two: Understanding

That is, does the person who can replicate my message also understand it? Does he or she know what I mean? Can he or she paraphrase the message to my satisfaction? If so, we've achieved effective communicative contact at the level of understanding.

Level Three: Acceptance or Agreement

Does the person accept or agree with my message? That is, does he or she accept as true my assertion of what is? Does he or she share my assertion of what is preferred? Does he or she agree that the need I have identified is indeed a need, or that a prescription I have developed has a high probability of meeting the need to which it is addressed.

Level Four: Importance or Relevance

While the person may be able to replicate my message, while he or she may understand it and maybe even agree with it, does the person place the same priority on it that I do? Is it as important to him or her as it is to me? Testing our priorities is the challenge of this fourth level of communicative contact.

Level Five: Commitment

Ultimately, of course, assuming that communicative contact has been effective at the prior four levels, the final test of my effort to communicate turns on whether the person is prepared to behave consistent with my message. It is at this stage that descriptions of what is and what is preferred, statements of need, and descriptions for action move from the domain of linguistics to the domain of behavior.

The goal of the AEL's Needs Assessment Project was two-fold: first, to identify educational needs as they were perceived from a variety of perspectives; and then to process those needs through a sequence of steps and with a variety of persons in order to produce a set of prescriptions of "action plans" for dealing with *those* needs that are amenable to R and D and that were perceived by most participants to be most important. Throughout this multi-step process, our implicit goal was to focus on needs that can survive the five levels of communicative contact just described--fidelity, understanding, agreement, importance, and commitment. Thus, the four major activities that comprised the project, made operational the two basic conceptualizations undergirding DAP--its three kinds of inquiry and its five levels of communicative contact.

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NEEDS ASSESSMENT CONFERENCE ACTIVITIES

An annotated list of the eight activities that comprise a needs assessment conference:

Activity 1: An Overview of the Conference

This activity provides an overview of the conference--its purposes and processes. Personal introductions occur, the question that drives the conference is presented, the eight activities of the conference are briefly explicated, and the agenda is presented.

Activity 2: Generating Initial Need Statements

A need statement is defined and illustrated, practice in identification and generation of need statements occurs, rules and procedures for generation are explicated, and finally, statements of need are generated by four small groups. This is where the grist is produced.

Activity 3: Searching for Clarity Within Each Group

This activity provides an opportunity to address the question of clarity and understanding within each of the four small groups. Focus is on meaning of each statement, not on the truth or value of its assertions.

Activity 4: Confirming Clarity Across the Groups

This activity provides an opportunity to address the question of clarity across the groups, i.e., are the statements clear to individuals who were not part of the generation process.

Activity 5: Preparing Each Group's Product

This short activity involves preparing on 4 x 6 cards the reviewed and refined statements. These cards will be used extensively in the next activity.

Activity 6: Collapsing Need Statements to Remove Redundancies

This activity produces two products: a verbatim list of statements taken from the cards and a revised set of statements--collapsed and edited to reduce redundancy or ambiguity. This involves sorting the need statements into clusters and rewriting. Two versions are prepared: one typed on slips of paper for each participant and the other prepared on transparencies.

Activity 7: Reviewing and Approving the Revised Need Statements

In this activity, the products from preceding activities are reviewed and then, using overhead transparencies, each revised need statement prepared for the total group is reviewed and approved. Any editing which occurs on the acetates is also recorded on the corresponding slips of paper.

Activity 8: Assessing the Importance of the Need Statements

In this activity participants discuss (pro or con) from their particular perspective each need statement. They then rate the importance of the needs described in each need statement using a modified Q sort technique.

The first five activities comprise the first afternoon's session. The sixth is carried out at night by Conference Coordinators. The seventh comprises the next morning's session, and the eighth activity is the next activity during the second afternoon.

ACTIVITY 1

PURPOSE:

The purpose of this activity is to provide an overview of the conference, its purposes and processes.

PROCEDURES:

Begin the conference with a welcome (by one or more appropriate persons).

Explain the purpose of the conference—to learn what the participants consider to be the most important educational needs of the local school district.

Provide a brief explanation of the 2-step process: (1) identifying the needs, and (2) assessing their importance. The processes to be used are structured, group processes, requiring public display and review of many of their deliberations. Inform participants of any validation activities that will be conducted in connection with the conference, and give them some information about how the results of the Needs Assessment will be used.

Introduce the general categories of people who are participating in the conference, and then allow each individual to make his/her own personal introduction and identify the category represented.

Give a brief overview of the eight activities that will take place during the conference.

OUTCOME/PRODUCT:

The participants have the "content" and the conference coordinators have the "process." Together, they can create an effective conference and a useful product.

ACTIVITY 2

PURPOSE: The purpose of this activity is to have conference participants generate, in small groups, the initial set of need statements.

PROCEDURES: Provide some general information about the meaning of a "need statement" and the procedures that will be used to generate it. Ask that they avoid the generation of "prescriptions" as much as possible, and to focus instead on actual needs.

Define a need statement by identifying its three parts:

(1) a referent or broad topic,

(2) a description of what is with respect to that topic,

(3) a comparable description of what is preferred with respect to that same topic.

A need (or need statement) describes a discrepancy between what is and what is preferred. Give a few examples of need statements that have been written in this format.

Conduct a two-part practice session in which participants first take a list of statements and identify each one as a what is or what is preferred statement. In the second part, have them actually generate several need statements, using the three parts described above. Then have them read their statements aloud for group discussion.

Be sure everyone has in mind the question that guides the conference: What do you, as a group, consider to be the most important educational needs of your local school district?

Ask the participants to go to their assigned groups, identify a recorder and begin generating need statements (on butcher paper) with no questioning of clarity or understanding.

OUTCOME/PRODUCT: The initial set of need statements, generated in small groups.

ACTIVITY 3

PURPOSE: The purpose of this activity is to search for clarity and understanding of the need statements within each group.

PROCEDURES: While remaining in the original groups, have participants discuss each statement for clarity and understanding. Do not allow questioning of truth or value, and insist that they focus on meaning.

Have each group select a moderator to keep the discussion moving, and to generally help the group achieve consensus on the meaning of each need statement. In addition, each group must select a recorder who will make notations of any necessary editing on the original set of need statements.

Using a 3-point scale, have each participant rate the clarity of each need statement. Then, ask that they discuss each need statement, focusing on them one at a time, using the clarity ratings.

OUTCOME/PRODUCT: The outcome or goal is two-fold:

(1) to achieve reasonable consensus among group members on the clarity, and

(2) to make certain the intended meaning would be clear to people outside the group.

ACTIVITY 4

PURPOSE: The purpose of this activity is to have people who were not party to the generation of the original need statements confirm the clarity of those statements.

PROCEDURES: Ask that three members of each group (excluding moderator and recorder) volunteer to move to another group. Then have the "new" members of each group use the procedures from Activity 3 to rate clarity of the need statements. The intent here is not to find fault, but to bring the perspective of persons who have not been party to each group's deliberations. This visit ought to confirm the general success of each group's earlier search for clarity.

OUTCOME/PRODUCT: A set of need statements that are clear, not only to the group of people who generated them, but also to individuals outside that group.

ACTIVITY 5

PURPOSE: The purpose of this activity is to get the "final" version of the need statements transferred from the butcher paper to 4 x 6 cards.

PROCEDURES: Ask that the visiting members return to their original groups for this activity.

Have each group take a final look at their statements and refine them as necessary in light of the suggestions offered by the visitors. When groups are satisfied with their products, have them write each need statement on a separate 4 x 6 card. The group identification must appear on each card, and the statements must be written in the 3-part format (referent, what is, what is preferred).

OUTCOME/PRODUCT: All need statements prepared by the groups, in final edited form, on 4 x 6 cards.

ACTIVITY 6

PURPOSE: The purpose of this activity is to remove redundancies and collapse similar or related statements into one.

PROCEDURES: The activity is performed by the conference coordinators and occurs during the evening, following the first day's conference activities.

Read each card, and group together those statements that seem to be addressing the same or closely related needs. After all cards have been read and placed in a group, one or more revised need statements must be written for each group. The revised need statements should be reduced to two components--what is and what is preferred. The referents wiil have served their purpose by this point, and can be dropped.

OUTCOME/PRODUCT: Two products will result from this activity:

(1) a typed verbatim list of the need statements, exactly as they were written on the 4 x 6 cards,

(2) the statements, collapsed and revised as necessary to reduce redundancy or ambiguity.

Produce a complete set (photo copy) for each participant and one set on transparencies for use with overhead projector.

ACTIVITY 7

PURPOSE:

The purpose of this activity is to have the participants review the revised/collapsed statements for clarity, and to insure that none of their original ideas were lost.

PROCEDURES:

Distribute to the participants the typed verbatim list of need statements and give them a few minutes to read/review the list.

Next, distribute the set of revised need statements. Give a brief overview of the procedures used the night before to remove redundancies, collapse and write the revised statements.

Using the overhead projector and transparencies, review each statement with two concerns in mind:

(1) are the statements as clear as those on the verbatim list?

(2) have any of the ideas presented in the original need statements been distorted, ignored or overemphasized?

Record any editing by the group directly on the transparency, and instruct the participants to record those same editings on their set of need statements.

After all need statements have been reviewed and any editings recorded, ask the following question before proceeding to Activity 8: Taken as a total set, can you accept the need statements that we've just reviewed and given a final edit as a fair representation of the multiple needs that were identified yesterday in the small groups?

OUTCOME/PRODUCT:

A set of revised/collapsed need statements that have been confirmed by participants to be a fair representation of their perceived needs.

ACTIVITY 8

PURPOSE: The purpose of this activity is to allow each participant to rate the importance of each need statement that was reviewed by the group in Activity 7.

PROCEDURES: Conduct this activity in a two-step process, considering each statement one at a time:

First, give participants the opportunity to argue the importance of the statement from their particular perspective (e.g., parent, teacher, student).

Next, allow each individual to draw his/her own conclusions about the importance of the need statement, and to rate that statement accordingly, using a Q-sort technique. Rating should be done in terms of three considerations:

(1) the personal priority placed on that need,

(2) the potential impact on the school district if that need were met, and

(3) the comments or arguments made about that need statement.

OUTCOME/PRODUCT: The complete set of conference need statements, rated for importance by all participants—the final product.

Appendix B

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"Excellence For The Information Age"

THE SEVENTH NATIONWIDE VOCATIONAL EDUCATION DISSEMINATION CONFERENCE

November 13-15, 1984
Columbus, Ohio

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