This study designed, implemented, and evaluated a set of learning experiences designed to help curriculum specialists in the Wisconsin Vocational, Technical and Adult Education (VTAE) system increase their competencies. These learning experiences were validated in a three-day seminar. The overall research methodology of the study was based on an instructional development model developed by the National Special Media Institutes Consortium. A change model for the activities was developed. Thirteen presentations made up a set of learning experiences in the seminar, including curriculum development, instructional development, evaluation, small group analysis, teaching and learning styles, and psychovector analysis. Evaluation of the seminar indicated that the curriculum specialists found the experience relevant; a follow up indicated a commitment on their part to apply the seminar activities to their job. Some modification of the program was suggested. Appendixes contain material used to evaluate the seminar and some of the materials developed for the seminar. (JY)
Professional Development

Needs identification

Dissemination of Research Results

Applied Research
FINAL REPORT
Project No. 19-004-151-223B

Conducted by
Geoffrey G. Saville

CENTER FOR VOCATIONAL,
TECHNICAL AND ADULT EDUCATION
UNIVERSITY OF WISCONSIN-STOUT

July 31, 1973

CURRICULUM SPECIALISTS' SEMINAR
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Permission was received to reproduce the copyrighted materials appearing in Chapter II.

1. Table 2-1, Pr. I1-2 (and subsequent sub-headings)

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Final Report of
CURRICULUM SPECIALISTS SEMINAR
Project No. 19-004-151-223B

Conducted by
Geoff Saville

A SUB-PROJECT OF THE GRADUATE STUDENT PROJECT
PHASE II
Project No. 19-004-151-223

Project Director
Orville Nelson

CENTER FOR VOCATIONAL,
TECHNICAL AND ADULT EDUCATION
UNIVERSITY OF WISCONSIN-STOUT

July 31, 1973

The research reported herein was performed pursuant to a grant or contract with the Wisconsin Board of Vocational, Technical and Adult Education, partially reimbursed from an allocation of federal funds from the U.S. Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official State Board of U.S. Office of Education position or policy.
ACKNOWLEDGEMENTS

It has been a pleasure to work on this project due to the cooperation and assistance provided by the staff at the Center for Vocational, Technical and Adult Education at the University of Wisconsin-Stout and the staff of the Wisconsin VTAE system. In particular the researcher acknowledges the expertise and leadership of Dr. Orville Nelson and Dr. Harold Halfin, co-directors of the Center for VTAE. Mr. Joseph Hugaman and Dr. Charles Schuller provided the researcher with insights into the Instructional Development process and a new direction for doctoral studies. Mr. Clifford Zenor, Curriculum Supervisor, Wisconsin Board of VTAE, consulted with the researcher during the entire project and helped to identify the "people assisting skills".

The success of the seminar was due to a close liaison with all presenters to ensure continuity without overlap and the researcher expresses his thanks to seminar staff, especially Dr. Jerry Coomer, Dr. John Deutscher, Dr. Calvin Stoudt, and Mr. John Banks. Finally I am indebted to my wife Monica and daughters Gillian and Carolyn who accepted and supported my "impossible" schedule during the past six months, so that I could complete this project.
CHAPTER I

IDENTIFYING COMPETENCIES OF CURRICULUM SPECIALISTS

Summary

This study designed, implemented and evaluated a set of learning experiences to help Curriculum Specialists in the Wisconsin Vocational, Technical and Adult Education (VTAE) system increase their competencies. These learning experiences were validated in a three-day seminar held at the Center for VTAE at the University of Wisconsin-Stout.

During the past five years the increasing emphasis in the Wisconsin VTAE system on the individual learner and his learning process has resulted in the widespread introduction of individualized learning using a wide range of instructional communication systems. Recent research in identifying teaching and learning styles at Fox Valley Technical Institute and the Center for VTAE at the University of Wisconsin-Stout, has extended this concept to personalizing the individual learner's interaction with a broad range of resources which can produce learning.

The pivotal person in each vocational district with the responsibility for curriculum, instructional and evaluation development was the Administrator of Instructional Services until increasing pressure of staff administrative duties led to the creation of the new position of "Curriculum Specialist" or "Curriculum Coordinator".

The overall research methodology of the study was based on an Instructional Development model developed and tested over a three year period by the National Special Media Institutes Consortium of four universities. The researcher evolved a change model for the activities incorporated in the seminar to facilitate sequencing the presentations. Thirteen presentations made up the set of learning experiences in the seminar and included curriculum development, instructional development, evaluation, small group analysis, M.B.O., teaching and learning styles and psychovector analysis.

The evaluation of the seminar indicated that the Curriculum Specialists found the learning experiences relevant to their district needs, and well sequenced follow-up indicates a high degree of commitment on the part of the Curriculum Specialists to apply the seminar activities on the job. Observations by the seminar staff indicated that the Curriculum Specialists were able to clarify their own roles, and improve their "people assisting" and leadership skills and attitudes as a result of attending the seminar.

The researcher made four recommendations as a result of his experience in the project. They include a planned sequence of seminars incorporating many of the activities developed by the Special Media Institutes. A suggested program for a follow-up seminar is included in the recommendations.
Evolution of a Curriculum Specialist

Wisconsin has been and continues to be the leading American state in the provision of vocational education opportunities at the post-high school level. The present delivery system of sixteen VTAE districts under the leadership of the Wisconsin Board of VTAE evolved out of state legislation in 1965. The federal Vocational Education Amendment of 1968 stimulated the Wisconsin Vocational districts to rapidly diversify their program offerings and implement "open door" and "advanced status" admission policies to cater for individual differences in entrance competencies.

During the past five years, the increasing emphasis in the Wisconsin VTAE system on the individual learner and his learning process has resulted in the widespread introduction of individualized learning using a wide range of instructional communication systems. Recent research in identifying teaching and learning styles at Fox Valley Technical Institute and the Center for VTAE at the University of Wisconsin-Stout, has extended this concept to personalizing the individual learner's interaction with a broad range of resources which can produce learning. (Banks, 1973) (Oen, 1973)

The pivotal person in each vocational district charged with this responsibility for curriculum, instructional and evaluation development was initially the Administrator of Instructional Services. He or she acted as a liaison between instructors and administrators as well as a curriculum or instructional innovator. With the rapid growth of vocational programs in Wisconsin during the past five years, the Administrator of Instructional Services in most districts became increasingly involved with staff administration and the faculty lost its leadership in the area of curriculum, instructional and evaluation development.

This situation has been rectified in nine districts by creating the new position of "Curriculum Specialist" or "Curriculum Coordinator". The persons appointed to this position have the experience in teaching, supervision and coordination which is necessary to establish credibility with faculty, but most lack the specialized preparation in curriculum, instructional and evaluation development procedures necessary to maintain leadership in such a pivotal position. Their individual roles continue to be in a state of flux for they are essentially in a staff position to the instructors, providing a service and support function. Role conflict exists where the Curriculum Specialist is also expected to evaluate the instructional staff.

An exception to this situation exists at Milwaukee Area Technical College where the Curriculum Specialist has corporate identity in a team of five specialists. Their specializations include: curriculum, instructional and evaluation development, supplemented by a learning resources consultant and an editor.
Need for Learning Experiences

The need for the learning experiences incorporated in this seminar arose out of a conference of Curriculum Specialists held at the Center for Vocational, Technical and Adult Education at the University of Wisconsin-Stout in November, 1972. Four graduate students under the leadership of Mr. Clifford Zenor, Curriculum Consultant for the Wisconsin Board of Vocational, Technical and Adult Education, developed, administered, refined and readministered a Likert-type task analysis designed to identify many of the critical competencies of Curriculum Specialists. The task analysis together with personal discussions with the participants isolated the need to identify "people-assisting skills" and systematic curriculum development procedures.

Research by Price (1971) and Igl (1972) at the University of Wisconsin-Stout indicated that VTAE instructors' attitudes toward curriculum development and instructional development had been improved through in-service workshops stressing the systems approach. Both Price and Igl recommended that further workshops be conducted on these topics. The Professional Growth Week Workshop for VTAE instructors held at the Center for Vocational, Technical and Adult Education at the University of Wisconsin-Stout, June 4 - 8, 1973 provided one-hundred instructors with competencies for instructional improvement and individualizing instruction. Included in the program were presentations on Curriculum Development Systems and Instructional Technology.

Research in this area is consistent with the analysis of needs arising out of the "Development of a Convergence Plan for Vocational Education in Wisconsin" by Nelson (1972). The contribution to the convergence plan may be seen in item 5-1-2, p. 3.17, "Identify program and curriculum development procedures and models available". (See Appendix E)

Thus, there was a need to design, implement and evaluate a set of learning experiences to help Curriculum Specialists in the Wisconsin Vocational, Technical and Adult Education system learn "people-assisting" and leadership skills and attitudes necessary to apply systematic instructional problem-solving procedures to their respective districts.

Problem

The problem of the study was to design, implement and evaluate a set of learning experiences to help Curriculum Specialists in the Wisconsin Vocational, Technical and Adult Education system increase their competencies.

Objectives

The objectives of this project were:

1. To help Curriculum Specialists clarify their role in the Wisconsin Vocational, Technical and Adult Education system by identifying the people-assisting and leadership skills and attitudes as well as the curriculum development skills needed in this area.
2. To develop learning experiences which would help Curriculum Specialists acquire these skills and attitudes in people-assisting, leadership and curriculum development.

3. To validate and evaluate the results of these learning experiences in a seminar at the Center for Vocational, Technical and Adult Education, University of Wisconsin-Stout, and report the findings to the Wisconsin Board of Vocational, Technical and Adult Education.

Rationale

In conceptualizing the role of the Curriculum Specialist, the researcher avoided areas of inconsistency and role conflict which exist in many districts. The role of the Wisconsin VTAE system (a Supra System) in its simplest form is shown below.

<table>
<thead>
<tr>
<th>People</th>
<th>VTAE System</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abilities -----→</td>
<td>Develop programs to meet the needs of industry and people</td>
<td>Jobs which require specific skills and abilities</td>
</tr>
<tr>
<td>Skills ------→</td>
<td>Bring students, staff and resources together in an effective and efficient manner.</td>
<td>---→ present reinforcers</td>
</tr>
<tr>
<td>Interests -----→</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needs ----------→</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure I-1: Role of the VTAE System
(from "Leadership Seminar using Simulation Techniques", Menomonie, Wis.: Center for VTAE, 1972 p. I-4.)

People who are potential employees in industry have a variety of abilities, skills, interests and needs. The VTAE system identifies these needs of people and industry, decides what elements are to be taught on the job or in the VTAE system and develops programs to meet these needs.

A typical VTAE district structure (a Supra System) is shown in Figure I-2 showing the position generally occupied by the Curriculum Specialist or Coordinator. The role of the Curriculum Specialist (a system) was hypothesized as shown in Figure I-3.
TYPICAL LOCATION OF THE CURRICULUM SPECIALIST IN THE STRUCTURE OF A VTAE DISTRICT

Figure 1-2
CONCEPTUALIZING THE ROLE
OF A CURRICULUM SPECIALIST

Figure I-3
The process of curriculum development used by the curriculum specialist was hypothesized in Figure I-4: A Curriculum Development Model for Vocational Education. It consists of an identification of needs with the assistance of the advisory committee, a task analysis to determine objectives, selection of learning experiences and compatible mediating activities and finally continuous evaluation and revision of the course or program.
Figure 1
Role Relevant Curriculum Development Model

In attempts to fulfill human needs in given environments, we take courses of action which involve and which require individuals and groups participating.

People providing specialized services through jobs occupations professions, each of which involves one or more functions.

What says this program produces the desired competencies?
What evidence is there that these are competencies required for the tasks?
How were these tasks shown to be required in this job?
How was it determined that this job contributes to the solution?
Why is this thought to be a good solution?

Selection of content, design of learning experiences, development of instructional strategies, design of evaluation.

Performance objectives are written to guide the selection of courses of action and the performance of tasks and sub-tasks which are fulfilled by the performance of various roles in which they perform.

Tasks and sub-tasks which are written to develop competence in performing these tasks.

Selection of content, design of learning experiences, development of instructional strategies, design of evaluation.

Individuals and groups participating in the performance of tasks.

Jobs occupations professions, each of which involves one or more functions.

In attempts to fulfill human needs in given environments, we take courses of action which involve and which require individuals and groups participating.

What says this program produces the desired competencies?
What evidence is there that these are competencies required for the tasks?
How were these tasks shown to be required in this job?
How was it determined that this job contributes to the solution?
Why is this thought to be a good solution?

Selection of content, design of learning experiences, development of instructional strategies, design of evaluation.

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Tasks and sub-tasks which are written to develop competence in performing these tasks.

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Tasks and sub-tasks which are written to develop competence in performing these tasks.

Selection of content, design of learning experiences, development of instructional strategies, design of evaluation.

Individuals and groups participating in the performance of tasks.

Jobs occupations professions, each of which involves one or more functions.
In designing learning experiences to help the Curriculum Specialists increase their competencies, the researcher developed the diagnostic action-research model shown in Figure 1-5. The mix of cognitive and affective aspects of the learning experiences incorporated in the seminar varied with the amount of behavioral change desired. From this model it was possible to design and sequence learning experiences according to the change targets shown in the model.

To accomplish these types of change targets, simulation and gaming techniques were chosen as one instructional technique for the seminar. Research indicates that simulation games improve participants' on-the-job performance on tasks similar to those the participants practice in the game. They can also change participants' attitudes in a positive manner toward real-life persons whose roles they take in the game. Generally, the effectiveness of a simulation game for producing changes in either attitudes or behavior depends on the degree to which it requires the participants to employ knowledge or skills related to the attitude or behavior (Saville, 1973). Consequently, the seminar presentations were related to a personal profile of each participant and also their role in the Wisconsin VTAE system.

![Diagram of Modes of Behavior Change]

**Figure**

Seminar Model
CHAPTER II

PROGRAM AND PROCEDURES

Introduction

This chapter is divided into four sections. The first section explains the overall research methodology based on an Instructional Development Model which was used to identify, develop and evaluate appropriate learning activities for Curriculum Specialists. The second section lists the objectives which were established for a Seminar and the Schedule of Activities. The third section contains a summary of the seminar activities and presentations and the fourth section explains the seminar evaluation methods.

Research Methodology

The researcher used the fundamental model shown in Table 2-1 to identify, develop and evaluate appropriate learning activities for the Curriculum Specialists. This model was developed and tested over a three-year period by the National Special Media Institutes Consortium of four universities under a grant from the U.S. Office of Education.

The application of the Instructional Development Model to the problem is outlined below.

1. Identify the Problem

The researcher reviewed the task analysis of Curriculum Specialists conducted at the Center for Vocational, Technical and Adult Education (VTAE) at University of Wisconsin-Stout in November 1972. The task analysis had identified 101 tasks arranged in the following general categories or functions:

1.0 Curriculum Development
   1.1 Design Programs
   1.2 Design Instruction
   1.3 Evaluate Curriculum
2.0 Coordinate Curriculum
3.0 Liaison
4.0 Budgeting
5.0 Communicating
6.0 Developing and Managing Federal Projects
7.0 In-Service Training

Data analysis identified 1.2, Design Instruction as the critical function. There was a significant trend to modify many tasks to include the words "to assist". Mr. Clifford Zenor, Curriculum Supervisor, Wisconsin Board of VTAE consulted with the researcher and discussed the "people assisting" role of the Curriculum Specialist, with relation to the Media Specialist, Learning Resources Specialist, Administrators and
### Table 2.1
Instructional Development System

<table>
<thead>
<tr>
<th>Stage</th>
<th>Identify Problem</th>
<th>Analyze Setting</th>
<th>Organize Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Define</td>
<td>Audience</td>
<td>Tasks</td>
</tr>
<tr>
<td></td>
<td>Asses needs</td>
<td>Conditions</td>
<td>Responsibility</td>
</tr>
<tr>
<td></td>
<td>Establish priorities</td>
<td>Relevant resources</td>
<td>Time lines</td>
</tr>
<tr>
<td>II</td>
<td>Identify objectives</td>
<td>Learning</td>
<td>Construct prototypes</td>
</tr>
<tr>
<td></td>
<td>Terminal</td>
<td>Instruction</td>
<td>Instructional materials</td>
</tr>
<tr>
<td></td>
<td>Enabling</td>
<td>Media</td>
<td>Evaluation materials</td>
</tr>
<tr>
<td>III</td>
<td>Evaluate</td>
<td>Objectives</td>
<td>Implement/Recycle</td>
</tr>
<tr>
<td></td>
<td>Test prototypes</td>
<td>Methods</td>
<td>Review</td>
</tr>
<tr>
<td></td>
<td>Conduct try-outs</td>
<td>Evaluation</td>
<td>Decide</td>
</tr>
<tr>
<td></td>
<td>Collect evaluation data</td>
<td>techniques</td>
<td>Act</td>
</tr>
</tbody>
</table>

"These materials are part of the Instructional Development Institute (IDI) produced by the University Consortium for Instructional Development and Technology under a USOE grant. For further details write the UCIDT National Office, Instructional Media Center, Michigan State University, East Lansing, Michigan 48824."
Instructional Staff.

Tentative solutions to the problem included; simulation of curriculum development procedures in a group setting, simulation of a co-equal decision making role, developing curriculum models to meet district needs and further activities to clarify the role of the Curriculum Specialist. The problem was identified as designing, implementing and evaluating a set of learning experiences to help Curriculum Specialists in the Wisconsin VTAE system improve their competencies. A proposal was submitted to the Co-Director of the Center for VTAE at University of Wisconsin-Stout, Dr. Orville Nelson, and it was decided to validate the learning experiences in a seminar to be held during May or June, 1973.

2. Analyze the Setting

The researcher reviewed existing Instructional systems in the literature as well as Dr. Gerald Nagler's "IDEALS Concept Systems" as a basis for simulating systematic curriculum development. Visits were made by the researcher to Wisconsin VTAE districts to discuss instructional problems with Curriculum Specialists and observe their working conditions and the relevant resources available to them.

These visits emphasized the need on the part of Curriculum Specialists for informal leadership skills in working with advisory committees and faculty committees, and also the need for developing a curriculum or instructional model as the basis for following through on consultations with advisory committees or faculty. The researcher commenced to model the role of the Curriculum Specialist to begin to identify a set of learning experiences related to the tasks and functions of the position. The tasks and functions were generalized to operations, processes, concepts and finally competencies. (See Figure 2.3)

3. Organize the Management

The researcher determined the responsibilities associated with conducting the seminar, and developed time-lines for all other activities. The following support staff were identified:

Coordination: Dr. Orville Nelson
Dr. Harold Halfin

Systems Analysis: Dr. Mohar Arora

Instructional Development: Mr. Joseph Hagaman
Mr. Robert Ward
Dr. Charles Schuller, Director NSMI

Interpersonal Relations: Dr. John Deutscher
Dr. Calvin Stout
Dr. Jerry Coomer

Evaluation: Dr. Orville Nelson

Wisconsin Board of VTAE: Mr. Clifford Zener
The Center for VTAE at the University of Wisconsin-Stout has facilities designed to provide a flexible environment for research on this project. The center includes seventeen offices, conference room, stenographic pool, duplicating area, information processing room and five research labs occupying a total of 22,000 square feet.

4. Identify Objectives

The terminal objective or purpose of the seminar was to implement and evaluate a set of learning experiences to help Curriculum Specialists in the Wisconsin VTAE system increase their competencies. Working from the terminal objective a hierarchy of enabling objectives ranging from "essential" to "nice to know" was established. Concurrently the set of learning experiences was identified and the following objectives were established for the seminar.

At the conclusion of the seminar, the participant will be able to:

1. Take the components of a curriculum development system and develop a model to meet the needs of their district.


3. Utilize the Banks's Learning Activities Opinionnaire in assisting instructors make judgments about individual students when attempting to individualize and personalize a program, course or activity.

4. Distinguish between curriculum development, instructional development and evaluation development.

5. Identify five phases and exemplary decisions involved in an evaluation Development model.

A preliminary pre-test and a post-test were developed at this stage.

5. Specify Methods

Each objective was discussed with the support staff and related to a comprehensive personal profile of each participant. The objectives and their associated set of learning experiences were related to the change targets in Figure 1-3 and a series of thirteen presentations were outlined. These presentations were sequenced and related to anticipated change phases as illustrated in Table II-2.

6. Construct Prototypes

A curriculum systems game was developed to simulate a group problem solving situation and transparencies and printed materials developed for this activity. This was designed to lead into an explanation of Bales's Interaction Process Analysis.

The film "You Pack Your Own parachute" was reviewed and selected as a curtain raiser to raise the energy level of the participants and promote open discussion.
### TABLE II-2
SEQUENCING SEMINAR ACTIVITIES

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Presentation/Description</th>
<th>Change Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction - Attitudinal film</td>
<td>ORIENTATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Where are we going?</td>
</tr>
<tr>
<td>2</td>
<td>Curriculum Development as a Group Problem-Solving Activity</td>
<td>CLARIFICATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is the problem?</td>
</tr>
<tr>
<td>3</td>
<td>Analyzing the Informal Group - What is my role</td>
<td>ROLE CLARIFICATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Does this affect me?</td>
</tr>
<tr>
<td>4</td>
<td>Analyzing Administrative Styles - What is my role</td>
<td>ROLE CLARIFICATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is my role?</td>
</tr>
<tr>
<td>5</td>
<td>Instructional Development Process</td>
<td>CLARIFICATION/EVALUATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How do I feel about it?</td>
</tr>
<tr>
<td>6</td>
<td>Analyzing the Informal Group</td>
<td>EVALUATION/DECISION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is this my role?</td>
</tr>
<tr>
<td>7</td>
<td>Curriculum Development Systems</td>
<td>ROLE EVALUATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Who me?</td>
</tr>
<tr>
<td>8</td>
<td>Teaching and Learning Styles</td>
<td>EVALUATION/DECISION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What am I going to do about it?</td>
</tr>
<tr>
<td>9</td>
<td>Psychovector Analysis</td>
<td>PERSONAL and ROLE EVALUATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>So that is the way I appear to others?</td>
</tr>
<tr>
<td>10</td>
<td>Group Discussion - Modeling</td>
<td>EVALUATION/DECISION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How do I apply this to my district?</td>
</tr>
<tr>
<td>11</td>
<td>Goal Setting</td>
<td>ROLE EVALUATION/DECISION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can I apply this now?</td>
</tr>
<tr>
<td>12</td>
<td>Motivational Values of MBO</td>
<td>EVALUATION/DECISION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How can I prepare for MBO?</td>
</tr>
<tr>
<td>13</td>
<td>Developing Evaluation Models</td>
<td>ROLE EVALUATION/DECISION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What am I going to do about it?</td>
</tr>
<tr>
<td>14</td>
<td>Follow-up Seminars</td>
<td>COMMITMENT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I tried it and it works!</td>
</tr>
</tbody>
</table>
"Ranking Some Aims of Education" was selected as the discussion topic for the group to be observed and analyzed by the Curriculum Specialists.

The investigator consulted with the Director, National Special Media Institutes, Dr. Charles F. Schuller, at Michigan State University for additional evaluation of seminar prototypes.

7. Test Prototypes

The Professional Growth Week provided a large scale evaluation of many of the prototypes prior to the seminar.

The circular letter was sent out to each Curriculum Specialist together with the seminar agenda and information sheets. (See Appendix A)

8. Analyze Results

Analysis of the results of the presentations at the Professional Growth Week and an evaluation of the Professional Growth Week program provided the basis for some modifications of the seminar to meet the needs of the Curriculum Specialists.

9. Implementation

The learning experiences were finally packaged into thirteen articulated presentations for implementation in a three-day seminar at the Center for VTAE at the University of Wisconsin-Stout, June 26-28, 1973. The Schedule of Activities is shown in Table II-3.

A review of the outcomes of the seminar are included in Chapter III and a series of recommendations is included in Chapter IV.

10. Follow-up

A follow-up of the impacts of the seminar took place in letters to the participants and also through Mr. Clifford Zenor, Curriculum Consultant, Wisconsin Board of VTAE. Suggested follow-up seminars are outlined in Chapter IV.

Objectives of the Seminar

The following objectives were established for the Seminar for Curriculum Specialists.

At the conclusion of the seminar, the participant will be able to:

1. Take the components of a curriculum development-system and develop a model to meet the needs of their district.


3. Utilize the Banks's Learning Activities Opinionnaire in assisting instructors make judgments about individual students when
attempting to individualize and personalize a program, course or activity.

4. Distinguish between curriculum development, instructional development and evaluation development.

5. Identify five phases and exemplary decisions involved in an Evaluation Development model.

A brief personal profile of each presenter is included in Chapter III.
<table>
<thead>
<tr>
<th>DAY</th>
<th>MORNING</th>
<th>AFTERNOON</th>
<th>EVENING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1-2:50</td>
<td>7-10</td>
</tr>
<tr>
<td>8-8:30</td>
<td>Register</td>
<td>The Instructional Development Process</td>
<td>Dinner at the Knapp House with Chancellor Swanson</td>
</tr>
<tr>
<td>8:30-9</td>
<td>Introduction and Pre-Test</td>
<td></td>
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<tr>
<td>1</td>
<td>9-10:30</td>
<td>Film: &quot;You Pack Your Own Chute&quot; Curriculum Development as a Group Problem Solving Activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:40-12</td>
<td>Analyzing the Informal Group Analyzing Administrative Styles - What is my role?</td>
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</tr>
<tr>
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<td>7:30-9:30</td>
<td>Analyzing the Informal Group - Observation Techniques</td>
<td>1-2:10 Learning and Teaching Styles 7-9:30 Psychovector Analysts Interviews and Discussion</td>
</tr>
<tr>
<td>2</td>
<td>9:50-11</td>
<td>Discussion of Group Observation</td>
<td>2:30-5 Introduction to Psychovector Analysis</td>
</tr>
<tr>
<td></td>
<td>11:10-12</td>
<td>Curriculum Development Systems</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>8-9:30</td>
<td>Group Discussion of Curriculum Systems</td>
<td>2-4:20 Developing Evaluation Models</td>
</tr>
<tr>
<td></td>
<td>9:40-11</td>
<td>Goal Setting</td>
<td>4:30-5 Seminar Evaluation and Post Test</td>
</tr>
<tr>
<td></td>
<td>11:10-1</td>
<td>Motivational Values of MBO</td>
<td></td>
</tr>
</tbody>
</table>
Summary of the Seminar Activities

1. Introduction (Orientation Phase) ... Geoff Saville
   A. Welcome to participants
   B. Administer pre-test
   C. Introduce the film "You Pack Your Own Chute" with a brief preliminary discussion about the obstacles facing Curriculum Specialists
   D. View the film
   E. Repeat opening question on obstacles (looking for change in attitudes) and ask the group to what they attribute the sudden change in emphasis
   F. Discuss the subtility of the film; unrealistic fears, assumptions, self-awareness and self-responsibility as they affect the Curriculum Specialist

2. Curriculum Development as a Group Problem Solving Activity (Clarification Phase) ... Geoff Saville
   A. Introduce three curriculum orientations which influence the curriculum developer: social conformity, scholarship in a discipline and effective living.
   B. Discuss the significance of the effective living orientation for vocational and applied subjects, especially in providing an effective humanistic education
   C. Discuss the verbal limitations of the other two orientations for Vocational, Technical and Adult Education (VTAE) students.
   D. Introduce the Sticks and Stones Game
   E. After the group have played the game and solved the problem, explore the nature of leadership with the group
      * What are the characteristics of an effective group leader?
      * How did leadership emerge in the group?
      * Ask for comments on group morale and individual motivation
      * Do similar activities occur in an advisory committee meeting or a department meeting?
   F. Model a simple three phase system - behavioral objectives based on the game components
   G. Model a three phase curriculum development system
H. Compare the derived models with published models of curriculum development systems

I. Discuss the implications of curriculum development systems for the VTAE districts

3. **Analyzing the Informal Group - What is my Role?**
   (Role Clarification Phase) . . . . . . . . . . Jerry Coomer

   A. Explain Bales Interaction Process Analysis. (See Appendix D for details of the presentation materials) Have participants reflect upon the nature and extent of leadership that emerged in each group, and the degree to which it was effective in solving the Curriculum Systems Problem

   B. Give each participant an opportunity to:

   * discuss those attributes of personality that are important to effective leadership
   * explore the importance of the human relations (people-handling skills) and the curriculum development (task-handling skills) of the Curriculum Specialist
   * distinguish between formal leadership (positions of authority) and informal leaders (who have little or no formal position, but exert leadership in getting things done
   * compare the productivity of groups that appoint a leader with groups that do not

   C. Administer Leadership Questionnaire

   D. Discuss the role of the Curriculum Specialist with respect to formal and informal leadership

4. **Analyzing Administrative Styles - What is my Role?**
   (Role Clarification Phase) . . . . . . . . . . Jerry Coomer

   A. Introduce the film "Styles of Leadership" relating it to the previous discussion about productivity of informal and formal leadership

   B. Define legitimate, expert, referent, reward and coercive power

   C. View the film

   D. Discuss the leader's decision-making power as a function of group involvement

   E. Discuss the Blake and Mouton Managerial Grid

   F. Discuss in overview the role of the Curriculum Specialist with respect to the leadership-motivating style or styles existing in their district.
5. The Instructional Development Process
(Role Clarification/Evaluation) . . . . . . Joseph Hagaman
Robert Ward

A. Introduce Instructional Development with:
- broken squares game
- definition of terms
- heuristics for Curriculum Specialists

B. View the filmstrip "Jumbo Jet" and discuss the Instructional Development process used by United Airlines to train their 747 pilots.

C. Discuss the steps in advising instructors on the design of instructional packages.

D. Visit the Elementary Photographic Laboratory and "walk through" the instructional development materials developed to individualize the course.

E. Discuss the I.D. process with the coordinator of Photography, Mr. Robert Ward, to determine the rationale for; individualization, small group and large group instructional settings, the type of instructional booklets developed and finally the cumulative evaluation procedures used in the course.

F. Conclusions: Changing emphasis from the teaching to the learning process also includes evaluation.

6. Analyzing the Informal Group
(Role Evaluation/Decision Phase) . . . . Jerry Coomer

A. Introduce the method of analyzing the small informal task group using Bales's Interaction Process Analysis (Refer to "Profile of a 'Profile' of a 'Satisfied' and a 'Dissatisfied' Group on Case Discussion Task" in Appendix D.)

B. Administer the "Open Minded Aptitude Test" to participants.

C. Introduction of the experimental group to the case discussion task, "Ranking Some Aims of Education".
   Specify the ground rules:
   (i) You must work as a group
   (ii) Do not choose a formal discussion leader
   (iii) Record the rating as the group decides on it

D. Record discussion on VTR for review and discussion while the seminar participants record the frequency of 12 categories of the interaction profile.

   COFFEE BREAK

E. Discuss the group observation findings:
   - Convert participant's tally of interactions to percentages
- Identify critical acts for satisfied and dissatisfied groups
- Importance of seating positions on role structure
- Changes in role structure - task specialists, human relations specialists, the scapegoat and the effects on group equilibrium
- Non verbal communication patterns

F. Summary: What roles should a Curriculum Specialist play to maintain equilibrium in a small task group setting?

7. Curriculum Development Systems
   (Role Evaluation Phase) . . . . . . . . . Geoff Saville

   A. Replay the Sticks and Stones Game to achieve closure on the problem-solving situation
   B. Discuss the group interaction in terms of Bales Analysis
   C. Explain the difference between observing the group process and being able to analyze the group's decision-making process.
   D. Derive a four phase curriculum system using the analogy of the blocks to represent the phases or components of the system, the stone to represent the program or course and the popsicle sticks to represent the feedback components to support the program or course.
   E. Recognize and identify the following systems terms: input, output, processes, feedback and interface.
   F. Summary of curriculum development systems for VTAE districts: The "best" system is the one that works for your district - if it does not work, modify it.

8. Teaching and Learning Styles
   (Role Evaluation/Decision Phase) . . . . . . . John Banks

   A. Introduction to research project being conducted by the University of Wisconsin-Stout and Fox Valley Technical Institute during 1972-73
   B. Briefly summarize current research in matching teaching and learning styles and applying the results to individualized instruction
   C. Administer and score the Learning Style Opinionnaire
   D. Define: Learning Style
      - Concrete/Symbolic Learning Style
      - Structured Unstructured Learning Style
   E. Summary: Interpret the results of the Learning Style Opinionnaire as they apply to individualizing instruction in your VTAE district.
9. **Psychovector Analysis**  
(Role Evaluation/Decision) . . . . . . John Deutscher  
Calvin Stoudt

A. Introduce the directional forces and motivational values of normal emotions as portrayed by Psychovector Analysis (Appendix D)

B. Involve the participants in evaluating their changes in emotions to the situations created by the presenters.

C. Interview each participant and record the interaction on videotape

D. Playback interviews to the total group. Discuss the type of verbal and non-verbal behavior and the range of emotional responses elicited during the interview.

E. Discuss the implications of the Psychovector Analysis Technique for the Curriculum Specialist: understanding oneself as others view us, relating to instructional staff and administration, hiring or evaluating staff members

10. **Group Discussion - Modeling**  
(Evaluation/Decision Phase) . . . . . . Geoff Saville  
Clifford Zenor

A. Discuss the types of Curriculum Development models to meet district needs. (The incorporation of an evaluation process into the model did not seem to be well understood by all participants.)

B. Give each participant a three overlay transparency of a curriculum system incorporating the task analysis.

C. Discuss the procedures for developing their own district model of the curriculum development process.

11. **Goal Setting**  
(Role Evaluation Phase) . . . . . . Jerry Coomer

A. Introduce goal setting with the example of Charles Schwab - "Step up Your Game!"

B. Discuss the format and methods of setting individual and group goals with examples related to the VTAE districts

12. **Motivational Values of M.E.O.**  
(Role Evaluation Phase) . . . . . . Jerry Coomer

A. View the film "Management by Objectives", an introduction to the basic philosophy of MBO by management consultant John Humble
B. Discuss the application of MBO in the VTAE system to determine:
   - how it may affect the role of the Curriculum Specialist
   - how the Curriculum Specialist can facilitate its introduction into his/her district
   - the motivational values of MBO for the instructional staff

13. Developing Evaluation Models
    (Role Evaluation/Decision Phase) . . . . . . Orville Nelson

A. Discussion of the nature of evaluation
   (i) Derive definitions: 1. Evaluation
       2. Decision making
       3. Judgment
   (ii) Relate definitions to: - Bales's Interaction Process Analysis
       - Sticks and Stones Game used to simulate a Curriculum System
   (iii) Deduce evaluation as a service activity, carried out to provide data for decision making

B. Explain and discuss the context for generating evaluation systems. (see Appendix D for details) Conclude with the five decision areas in the curriculum and interaction models

C. Discuss the curriculum development sub-systems as they impinge on the Curriculum Specialist, emphasizing evaluation as a service activity articulating the sub-systems

D. Discuss the model of the Curriculum Specialists Role and explain how decisions are based on role perception

E. Discuss some general concerns of evaluation; validity, reliability and data management

F. Summarize the following points:
   - What is evaluation?
   - Why model the curriculum process?
   - Why model the role of the Curriculum Specialist?
   - Why model the evaluation of your curriculum system?

Seminar Evaluation

To evaluate the seminar and to enable staff at the Center for Vocational, Technical and Adult Education to improve future in-service seminars, four methods of evaluation were used, a) a Pre-Test - Post-Test, b) a Participant's Opinionnaire for Curriculum Specialists Seminar, c) a Follow-up Letter reviewing the seminar and inviting participants to respond and d) observations of attitudinal changes by the seminar staff.
Pre-test and Post-test

The pre-test and post-test consisted of twenty-one multiple choice items which covered the cognitive outcomes of all the presentations. Short answer type tests for the group dynamics and instructional development presentations were also included.

This instrument was administered during the first session and again during the last session of the seminar. To determine the probability that the cognitive outcomes were fulfilled, a t-test for gain was performed on the scores. A copy of the form is included in Appendix B and the summary of the responses is presented in Chapter III.

Participants Opinionnaire for Curriculum Specialists Seminar

This instrument consisted of twenty-one Likert-type items and three open ended response items designed to provide helpful suggestions for the staff to assess the relevance of the seminar activities. A copy of the form is included in Appendix C and summaries of the responses are presented in Table 3.1.

Follow-up Letter

A Follow-up letter was mailed to all participants with a review of the seminar, a suggestion for a future seminar and an invitation to respond to three processes which emerged during the seminar; a procedural process, a curriculum development process and an instructional development process. The evaluation development process also emerged at the conclusion of the seminar, but as this is a universal weakness of the participants the researcher deleted it from the follow-up letter to simplify the participant's response to the Curriculum Specialists role.

A copy of this letter and the responses from participants is included in Appendix D. Summaries of these responses are included in Chapter IV - Recommendations for Future Seminars.

Observations by Seminar Staff

The psychovector analysis technique provided insights into the interpersonal and person-handling skills of the participants. Details of the Model Selection Interview appears in Appendix D and the observations by seminar staff are included in Chapter III, Outcomes of the Seminar.
CHAPTER III

OUTCOMES OF THE SEMINAR

Introduction

This chapter includes a brief description of the participants as well as the evaluation results of the seminar. Most of the activities included in the seminar were an intimate mix of cognitive and affective aspects shown in Figure 1-1 of the Rationale. Consequently, although the cognitive pre-test, post-test results show modest gains in knowledge, the researcher was of the opinion that the results of the participants opinionnaires and the responses to the follow-up letters were more significant.

The outcome of learning experiences incorporated in this seminar will be indicated by the degree of commitment with which the participant put these experiences into practice. The ultimate evaluation will eventually occur in the classrooms of each VTAE district.

Profile of Participants

Dr. Spiro Mehail, Milwaukee Area Technical College (Instructional Resources Coordinator)

Milwaukee operates from 5 campuses within the city and has an F.T.E. of approximately 14,000 students and a staff exceeding 500. Two-thousand-seventy-two students graduated in May, 1973 from the Associate Degree, (2 years F/T, 6 years P/T) Adult-Vocational, Adult High School and Apprenticeship programs.

The "Curriculum Specialist" has a group identity within the Division of Instruction as there are at least 5 persons directly involved in curriculum development. M.A.T.C. has developed an excellent in-service training program.

Marvin Schrader, Lakeshore VTAE District (Curriculum Specialist)

Has an important role as consultant/coordinator in a district which includes Sheboygan and Manitowoc. A new district institute is now being built at Cleveland. Teaching background in Junior/Senior High School Science. Works closely with the Media specialists in individualizing instruction. Enrolled in the Ed.S. program at Stout during the summer session.

Mrs. Phyllis Nagler, Moraine Park VTAE - Fond du Lac (Curriculum Specialist)

A newcomer to this position, Phyllis is responsible to her predecessor, Allen Lindgren, who is now Administrator, Instructional Services.
Phyllis has a teaching background in social sciences. She is enrolled in the M.S. program at Stout during the summer session.

**Donald Bressler, Northeast Wisconsin VTAE - Green Bay (Instructional Supervisor)**

Young and enthusiastic, Don taught T & I for 8 years at Rice Lake before moving to Green Bay 4 years ago. Green Bay has a new modern campus, and relatively young staff, with a median age of 31. Don has involved staff in individualizing instruction using a mastery type of evaluation. He is responsible to his predecessor who is very supportive. Doug Rewling, the Media Specialist assists staff individualize instruction. The district is budget-conscious and conservative, but has initiated three unique new programs recently.

**Summary of Evaluation**

**Pre-test and Post-test**

The multiple choice section of 21 questions showed no appreciable gain during the seminar, but the short answer questions showed an overall gain of 70% between pre-test and post-test results. The actual scores on a 20 point scale rose from zero at the start of the seminar to an average of 14 points at the end of the seminar.

Analyzing the informal group using Bales Analysis, and Teaching and Learning Styles showed the greatest gains while the Development of Evaluation Models and the Instructional Development Process showed the need for follow-up learning experiences in these areas.

**Participants Opinionnaires**

The results of the opinionnaire are shown in Table III-1. Items 4 and 5 indicate that the learning experiences incorporated in the seminar were relevant to the participants and that the participants were generally satisfied with the amount of content. Items 6 and 7 show a high degree of satisfaction with the way the seminar activities were sequenced and designed. The main objective of the seminar was to implement a set of learning experiences and the participants response to item 10 indicates that they felt the instructional materials facilitated learning. There was a high degree of agreement in item 13 that the skills learned during the seminar would be very useful. Also, items 14 through 17 indicate that the participants were pleased with the interaction they experienced with the presenters.

Mr. Donald Bressler successfully repeated the MBO and Bales Analysis segment of the seminar during the summer of 1973, in an in-service session at Green Bay Technical Institute for district supervisors. (See Appendix C - Response to Follow-up Letters)

The open ended responses elicited the following general comments. The participants liked:
Table 3.1

Participant's Opinionnaire for Curriculum Specialists Seminar
(Based on a five-point scale; 1=Strongly disagree, 5=Strongly Agree)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Q2</th>
<th>IQR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient work space was provided for each participant.</td>
<td>4.833</td>
<td>.666</td>
</tr>
<tr>
<td>More supplies and materials should have been provided.</td>
<td>2.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Housing arrangements were satisfactory.</td>
<td>5.000</td>
<td>.500</td>
</tr>
<tr>
<td>The content of the seminar was relevant.</td>
<td>5.000</td>
<td>.500</td>
</tr>
<tr>
<td>More content could have been included.</td>
<td>2.000</td>
<td>1.000</td>
</tr>
<tr>
<td>The topics in the program fit together to make a coherent program.</td>
<td>5.000</td>
<td>.500</td>
</tr>
<tr>
<td>The seminar schedule of activities was well designed.</td>
<td>4.833</td>
<td>.666</td>
</tr>
<tr>
<td>The Knapp House should be retained in future seminars.</td>
<td>4.000</td>
<td>1.000</td>
</tr>
<tr>
<td>The smorgasbord should be retained in future seminars.</td>
<td>4.166</td>
<td>.666</td>
</tr>
<tr>
<td>The instructional materials facilitated learning.</td>
<td>4.500</td>
<td>1.000</td>
</tr>
<tr>
<td>There was sufficient opportunity for individualized discussions with the instructors.</td>
<td>4.166</td>
<td>.666</td>
</tr>
<tr>
<td>There was a lack of group interaction.</td>
<td>1.166</td>
<td>.666</td>
</tr>
<tr>
<td>The skills learned during this seminar will be useful on my job.</td>
<td>4.833</td>
<td>.666</td>
</tr>
<tr>
<td>The instructional team has a thorough knowledge of their topics.</td>
<td>4.833</td>
<td>.666</td>
</tr>
<tr>
<td>The instructional team was courteous and helpful to the participants.</td>
<td>4.833</td>
<td>.666</td>
</tr>
<tr>
<td>The instructional team was well organized.</td>
<td>4.500</td>
<td>1.000</td>
</tr>
<tr>
<td>I experienced teaching techniques which were new to me.</td>
<td>2.500</td>
<td>1.500</td>
</tr>
<tr>
<td>The food was very good.</td>
<td>4.500</td>
<td>1.000</td>
</tr>
<tr>
<td>In general, presentations were difficult to understand.</td>
<td>1.500</td>
<td>1.500</td>
</tr>
<tr>
<td>There were too few topics covered during the week.</td>
<td>2.000</td>
<td>1.000</td>
</tr>
<tr>
<td>The seminar was too long.</td>
<td>2.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>
1. The way in which all the topics were tied together and related to the needs of the participants - "indirectly but obvious". (Process)

2. "An opportunity to discuss mutual problems freely" (Process)

3. The discussion, presentations reactions with the group members etc. have helped to further define the role of the curriculum specialist. (Process)

4. Enjoyed discovering a look at myself. (Process)

The participants liked least:

1. No negative reactions (Process)

2. Disappointed that more curriculum specialists had been unable to attend (Product)

3. Knapp House presentation was similar to November 1972. (Process)

Additional comments included:

1. I look forward to further sessions in the future when we zero in on specific problems. i.e. General Education (Product)

2. The attention of the presenters to details of the individual participant's role (Process)

3. You have made it possible for me to look at my position in a more objective way and from a different perspective (Product)

The Follow-up letter: All participants have responded with details of models of the curriculum development process to meet the needs of their district. (See appendix C) There was no response from the non-participants at the time of publishing this report.

Mrs. Phyllis Nagler's M.S. Thesis "Educational Resources: A Unified Concept for Moraine Park Technical Institute" was an outgrowth of the learning experiences incorporated in the seminar. The conclusions of her thesis and the systematic model she developed for utilizing Educational Resources appears in Appendix C.

Observations by the Seminar Staff provided the most enlightening evaluation of the emotional and attitudinal changes in the participants. Staff members were in agreement that the participants had modified their role expectations as a result of the seminar and that they exhibited improved interpersonal and person handling skills.
CHAPTER IV

RECOMMENDATIONS

As a result of designing, implementing and evaluating a set of learning experiences to help Curriculum Specialists in the Wisconsin VTAE system increase their competencies, the researcher concluded that the main benefit to the participants was role clarification and role evaluation. The following recommendations are made by the researcher as a result of his experience in this project.

1. The seminar described in this project should be repeated for the Curriculum Specialists unable to attend in June, together with a representative from the seven districts who do not have a Curriculum Specialist. This is necessary to clarify the "Jeckyl-Hyde" roles that a Curriculum Specialist is often asked to perform, such as performance appraisal of instructional staff.

2. Seminars of two or three days duration be held for Curriculum Specialists three times per year to encourage an exchange of ideas between ALL the 16 VTAE districts.

3. One of the seminars be held at the Center for VTAE at University of Wisconsin-Stout each May in association with Professional Growth Week. During this seminar the instructional development process can be simulated by involving the VTAE staff in attendance. Research results from the CVTAE can be disseminated and discussed in this setting.

4. Before the 1974 Professional Growth Week, an Instructional Development Seminar should be held to take Curriculum Specialists, (or their counterparts in the 16 districts) through the techniques associated with specifying methods of instruction. A suggested program for this seminar is included in this chapter.

5. Following the 1974 Professional Growth Week, a seminar be held to concentrate on the Evaluation Development process.

6. The Wisconsin Board of VTAE should consider making a study of the feasibility of introducing the Instructional Development Institute program to Wisconsin as an exemplary program in Vocational Education in the U.S.A.
Recommendation No. 4

Suggested Program for a Future Seminar

1. Introduction:
   a) View "You Pack Your Own Chute" to reinforce the theme of the previous seminar and involve new curriculum specialists in discussion of the subtleties of the three film sub-themes as they affect their role.
   b) Discussion of Film Sub-Themes (Divide into two groups) Factors which facilitate and impede the Curriculum Specialists "teacher assisting" function.

2. Administer pre-test of methods of specifying solutions to instructional problems.

3. Small Groups - Devise simple models of 7 + 2 steps for:
   - curriculum development
   - instructional development
   - evaluation development
   Differentiate between these three activities.

4. Discuss the Instructional Development Model in detail.

5. Introduce the technique of specifying methods of instruction.

6. Curriculum Problems: (Groups of three)
   Prescribe an instructional solution to the following problem in the Cognitive/Affective/Psychomotor Domain, having access to unlimited/limited resources. (Design sample objectives for each domain which are relevant to all VTAE districts)

7. Discussion of solutions to instructional problems.

8. Review the procedures and techniques used for specifying methods of instruction. Relate these to recent research on Teaching and Learning Styles to achieve closure.

9. Review the film "You Pack Your Own Chute" and discuss the application of the film's principles during the seminar.
   * Does anyone have any differences to report?
   * Who sees more or different kinds of applications for Eden Ryl's comments and actions?
   At this stage use a questionnaire for participants to report:
   a) What key differences have you noticed in the behavior of others?
   b) What differences have you noted in your own behavior and attitudes?
   c) Have you noticed a greater enthusiasm in meeting challenges?
   d) Explain the real meaning of the main theme "You Pack Your Own Chute".

IV-2
10. Administer a post-test of cognitive outcomes of specifying methods in the Instructional Development

11. Summation of the Seminar
REFERENCES


Igl, D. H., Project to determine the Use of Media in Vocational, Technical and Adult Education. Menomonie, Wis.: Center for VTAE, 1972


Price, R. D., Instructional Technology: A Systematic Model for the In-service Training of Classroom Teachers. Menomonie, Wis.: The Graduate College, U.W.-Stout, 1971


Appendix A

Circular Letter to Curriculum Specialists

Seminar Program and Details of Staff
To:

From: The Center for Vocational, Technical and Adult Education
University of Wisconsin - Stout
Menomonie, Wisconsin 54751

Date: June 14, 1973

Subject: Seminar for Curriculum Specialists (June 26-28, 1973)

The schedule for the Seminar for Curriculum Specialists is now finalized and
enclosed for your convenience. The seminar is an outcome of the Task Analysis of
Curriculum Specialists conducted at UW - Stout in November, 1972. We are confident
that the seminar will meet your needs for in-depth experiences in Curriculum
Development, together with Individual and Group Interaction Analysis.

Registration

Registration will be at 8:00 a.m. on June 26 in Room 219 of the Applied Arts
Building.

Travel

Travel will be reimbursed at the rate of 10¢ per mile for the first 400 miles
and 7¢ per mile for those miles over 400.

Meals

Meals will be provided at no cost to the participants.

Room

Dormitory rooms will be provided at no cost to the participants and will be
assigned during registration.

Clothing

Plan to attend the class sessions in informal dress and bring something a little
more dressy for our dinner at the Logg Inn on Tuesday evening.

Enrollment for College Credit

One hour of graduate credit will be awarded to active participants who elect
to take the Seminar for graduate credit. The cost is approximately $31.00.

Contacts at Stout

If you have any questions, please contact either:

Geoff Saville, Graduate Student (phone 715/232-1126)
Harold Halfin, Director, CVTAE (phone 715/232-2482)
Orville Nelson, Research Specialist (phone 715/232-1382)

Enclosures: Seminar Agenda; Map of Stout; Parking Permit
Center For Vocational, Technical And Adult Education UW-Stout Menomonie, Wisc. (54751)
### Seminar for Curriculum Specialists
University of Wisconsin - Stout
Center for Vocational, Technical
and Adult Education

**TUESDAY, JUNE 26**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
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| 8:00 - 8:30 | Registration - Coffee and Rolls  
PAULA OWENS                     | Applied Arts Rm. 219 |
| 8:30 - 9:00 | Introduction to the Seminar  
Pre-Test of Participants  
GEOFF SAVILLE                                             | Applied Arts Rm. 219 |
| 9:00 - 10:20 | Curriculum Development as a Group Problem  
Solving Activity  
GEOFF SAVILLE                                         | Applied Arts Rm. 219 |
| 10:20 - 10:40 | Coffee Break                                                            |                |
| 10:40 - 12:00 | Analyzing the Informal Group, Analyzing  
Administrative Styles - What is my Role?  
JERRY COOMER                                      | Applied Arts Rm. 219 |
| 12:00 - 1:00 | Lunch (a'la Carte)                                                      | Commons        |
| 1:00 - 2:50 | The Instructional Development Process  
JOSEPH HAGAMAN AND BOB WARD                              | Communications Center Rm. 110 |
| 2:50 - 3:10 | Coffee Break                                                            |                |
| 3:10 - 5:00 | Applications of Instructional Development  
JOSEPH HAGAMAN AND BOB WARD                              | Communications Center Rm. 110 |
| 7:00 - 10:00 | Dinner at the Knapp House with Chancellor Swanson                        |                |
WEDNESDAY, JUNE 27

6:30 - 7:30  Breakfast - a'la Carte
            or
            Coffee and Rolls

7:00 - 7:30

7:30 - 9:30  Analyzing the Informal Group
              -Observation Techniques
              JERRY COOMER

9:30 - 9:50  Coffee Break

9:50 - 11:00 Discussion of Group Observation
            JERRY COOMER

11:00 - 12:00 Curriculum Development Systems
              GEOFF SAVILLE

12:00 - 1:00  Lunch (a'la Carte)

1:00 - 2:10  Learning and Teaching Styles
              JOHN BANKS

2:10 - 2:30  Coffee Break

2:30 - 5:00  Interaction Analysis
              JOHN DEUTSCHER AND CALVIN STOUDT

5:00 - 7:00  Dinner (Smorgasbord)

7:00 - 9:00  Interaction Analysis
              JOHN DEUTSCHER AND CALVIN STOUDT

Student Union
Applied Arts  
Rm. 219
Science Wing  
Rm. 151
Applied Arts  
Rm. 219
Applied Arts  
Rm. 219
Commons
Applied Arts  
Rm. 219
Applied Arts  
Rm. 219
Commons
Applied Arts  
Rm. 219
<table>
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<tbody>
<tr>
<td>6:30 - 8:30</td>
<td>Breakfast - a'la Carte or Coffee and Rolls</td>
<td>Student Union</td>
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<td>8:30 - 8:30</td>
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<td>Applied Arts Rm. 219</td>
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<tr>
<td>8:30 - 9:30</td>
<td>Group Discussion GEOFF SAVILLE &amp; CLIFFORD ZENOR</td>
<td>Applied Arts Rm. 219</td>
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<tr>
<td>9:30 - 10:20</td>
<td>Goal Setting JERRY COOMER</td>
<td>Applied Arts Rm. 219</td>
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<tr>
<td>10:20 - 10:40</td>
<td>Coffee Break</td>
<td></td>
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<tr>
<td>10:40 - 12:00</td>
<td>Motivational Values of M.B.O. JERRY COOMER</td>
<td>Applied Arts Rm. 219</td>
</tr>
<tr>
<td>12:00 - 1:00</td>
<td>Lunch (a'la Carte)</td>
<td>Commons</td>
</tr>
<tr>
<td>1:00 - 3:30</td>
<td>Developing Evaluation Models ORVILLE NELSON</td>
<td>Applied Arts Rm. 219</td>
</tr>
<tr>
<td>3:30 - 3:50</td>
<td>Coffee Break</td>
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<tr>
<td>3:50 - 4:30</td>
<td>Seminar Evaluation</td>
<td></td>
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<tr>
<td>4:30 - 5:00</td>
<td>Post Test GEOFF SAVILLE</td>
<td>Applied Arts Rm. 219</td>
</tr>
</tbody>
</table>
Meet the Staff

Name: Orville Nelson
Department: Education and Psychology
School: School of Education and the Center for Vocational, Technical and Adult Education, University of Wisconsin-Stout
Phone Number: 715/232-1382

Teaches courses in Survey Procedures, Instrumentation for Research, Curriculum Development, and Evaluation. Supervises Plan B papers and Education Specialist field studies. Manages research projects and counsels with students and staff on research procedures and data analyses. Areas of special competency: design of data collection forms, data analysis, and computer analysis of data. Curriculum development and evaluation. Research planning and management.

Name: Joseph Hagaman
Department: Instructional Technology Services
School: Learning Resources, University of Wisconsin-Stout
Phone Number: 715/232-2431

Works with university faculty in revising and developing lessons, units, and courses of instruction, especially those involving the use of instructional media. Coordinates the various media production services for complex projects. Teaches a graduate level course in Instructional Development. Areas of special competency: media design and utilization, instructional development.
Name: Geoff Saville

Department: Graduate Student - Ed. S. Program

School: On study leave from Sydney Teachers' College, Australia

Phone Number: 715/235-4073

Taught courses in Industrial Arts and Maths in Junior and Senior High Schools for 10 years. Involved in coordination of state-wide curriculum revision and in-service training of I.A. teachers during 1966. Teaches Materials Science, Industrial Processes, Drafting and Teaching Methods at Sydney Teachers' College. Areas of special interest include curriculum development systems and methods of mediating instruction.

Name: Harold Halpin

Department: Industrial Teacher Education and Center for Vocational, Technical and Adult Education

School: Industry and Technology

Phone Number: 715/232-2482 and 715/232-1130

Teaches courses in Cooperative Occupational Education Programs, Principles of Vocational, Technical and Adult Education and Issues in Vocational Education. Supervises Plan B papers. Program director and major adviser for the M.S. degree program Vocational Educators and the Education Specialist degree program in Industrial and Vocational Education. Areas of competency: task analysis and curriculum design.
Teaches all levels of undergraduate management courses and graduate management courses. Supervises independent studies and advanced technical problem courses. Consults with community industrial associations in geographical area for supervisory training in motivation, method engineering, and communications. Chairman of Department of Industrial Management at UW - Stout which is administered on the Management by Objectives system.

Name: Calvin Stoudt
Department: Guidance and Personnel Services
School: School of Education, University of Wisconsin - Stout
Phone Number: 715/232-2373

I am an unrestricted state licensed psychologist and a life certificated school psychologist. Taught elementary school - Worked as a counselor and school psychologist K-12. Consultant in interpersonal communication to VTAE and ABE workshops. Also selection and selection interviewing. Teach courses in theory of personality, mental testing, personality assessment, elementary guidance, psychology of development.
Teachers course in media technology - Elementary, Advanced and Color Photography. Motion Picture Production, Instructional Communications Systems, Film History and Appreciation and a Photography course for VTAE Menomonie.

Supervises the still photography facility and personnel.

Gives in-service presentations for teachers from elementary through VTAE in the use of a camera as an instructional tool. Consults with schools and teachers designing photography courses and facilities.

The background for the above includes field experience as a free lance photographer, photographic and A-V equipment sales and service.

Name: John Banks (Graduate Student)
Department: Center for Vocational, Technical and Adult Education
School: Graduate College, University of Wisconsin - Stout
Phone Number: 715/232-1126

On sabbatical leave from the Stockton Unified School District, Stockton, California. Attending Stout during the 1972-73 school year to earn an Education Specialist degree with an emphasis in curriculum development and evaluation.

Conducted research on the subject of learning styles in cooperation with Fox Valley Technical Institute. Areas of special interest: curriculum development, individualized instruction, vocational administration and instructional innovations.
Appendix B

Seminar Evaluation Instruments:
- Pre-Test and Post-Test
- Participants Opinionnaire
- Follow-up Letter to Participants
- Follow-up Letter to Non-Participants
- Follow-up Letter to Mr. Zenor
Directions: Place your name on the answer sheet together with today’s date. Select the best response and mark your answer on the answer sheet. If you change a response, erase the first response completely.

1. The Instructional Development process emphasizes:
   A. The teaching process
   B. Using media in instruction
   C. The learning process – problem solving
   D. Developing comprehensive instructional evaluation
   E. Systematic design of instruction

2. Learning Styles form a continuum between:
   A. Concrete - Symbolic
   B. Teacher centered - Student Centered
   C. Structured - Unstructured
   D. A and B
   E. All of the above

3. When evaluating a program or course, what strategy does the evaluator have to take in regard to the quality of the data he collects?
   A. Only totally accurate and validity data are usable
   B. Data must be accurate (reliable) but validity is not as critical in program evaluation
   C. Data must be valid and as accurate as possible given time constraints faced by the evaluator
   D. Data must be valid, but reliability is not a critical concern in program evaluation

4. The teacher who is deeply involved in individualised instruction is primarily a
   A. Manager of learning
   B. Provider of information
   C. Developer of instructional technology
   D. Programmer of subject matter content

5. Which of the following media is most useful in achieving objectives in the affective domain?
   A. Programmed instruction
   B. Sound/filmstrips
   C. Games and simulations
   D. Overhead transparencies
6. Which of the following statements is correct:
   A. One can develop a perfect curriculum system for each vocational district
   B. Curriculum development systems are static models of the real VTE situation
   C. Curriculum systems allow the teacher to accurately assess his teaching
   D. There are no ideal curriculum systems, they are all compromises
   E. None of the above

7. The category of goals most difficult to measure is
   A. Personal improvement
   B. Routine
   C. Innovative
   D. Problem solving
   E. All of the above

8. The category of goals which is measured by exception is
   A. Personal improvement
   B. Problem solving
   C. Innovative
   D. Routine
   E. All of the above

9. Which of the following is a valid example of a 3 stage curriculum system
   A. Design, Develop, Evaluate
   B. System objectives, design system, implement/Test/improve
   C. System analysis, System synthesis, System validation
   D. Curriculum development, Instructional development, Evaluation development
   E. All of the above

10. When utilizing the concept of individualizing instruction in an instructional program, what element may be opened up to accommodate the learner?
    A. Learn at own rate (Self pacing)
    B. Select own content (what is learned)
    C. Choosing the learning style (how it is learned)
    D. All of the above

11. Which of the following sets of descriptors best describes the term "Evaluation"?
    A. Tests, grades and norms
    B. Judgment, measurement and decision making
    C. Supervision, rating, and review
    D. Normal curve, tests, and difficulty
12. When mastery evaluation is used in instruction, learners are evaluated and compared against:
   a. Their national peer group
   b. Those in the class
   c. The objectives of the course
   d. Norms built from previous classes

13. Which of the following is an example of a 4 stage curriculum system:
   a. Depiction, Invention, Fabrication, Testing
   b. Identification, Diagnosis, Formulation, Feasibility, Testing
   c. Conceptualization, Definition, Prototype, Test prototype
   d. A and B
   e. All of the above

14. Consistent patterns of behavior applied by the individual to effectively and efficiently acquire knowledge, skills and attitudes, defines:
   a. Instructional Strategies
   b. Teaching Styles
   c. Cognitive mapping
   d. Learning Styles
   e. A and B

15. Which of the following styles of leadership involves the maximum group involvement?
   a. Consults
   b. Tells
   c. Sells
   d. Joins

16. The important advantage of a systems approach to curriculum development is:
   a. Standardization
   b. Feedback
   c. Simplicity
   d. Flexibility
   e. Evaluation
17. To what degree can classroom achievement test results be used to revise instructional materials?
   A. Extensively
   B. Moderately
   C. Slightly
   D. These data are not applicable

18. What identifies the criterion levels of performance for the evaluation of instructional activities?
   A. Test norms
   B. Test scores
   C. Objectives for the test
   D. Objectives for the program

19. Bales interaction process analysis studies small groups in terms of:
   A. Leadership styles
   B. Sociometric diagrams
   C. Positive and negative tasks
   D. Human relations tasks
   E. Informal group leadership

20. Management by Objectives is best described as:
   A. A staff motivational procedure
   B. A type of accountability system
   C. A mutual goal setting procedure
   D. A performance review procedure
   E. All of the above.
   F. None of the above

21. Which of the following orientations is most applicable to Curriculum Specialists?
   A. Power
   B. Achievement
   C. Affiliation
   D. Power/Achievement
   E. Achievement/Affiliation
   F. Power/Affiliation
To help us in improving our in-service educational programs, we would appreciate receiving your honest response to the following items. Please circle your response.

Ratings: 1 = SD = Strongly Disagree 2 = D = Disagree 3 = U = Uncertain 4 = A = Agree 5 = SA = Strongly Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
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<tbody>
<tr>
<td>1. Sufficient work space was provided for each participant.</td>
<td>1</td>
<td>2</td>
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<td>2. More supplies and materials should have been provided.</td>
<td>1</td>
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<td>3. Housing arrangements were satisfactory.</td>
<td>1</td>
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<td>4. The content of the seminar was relevant.</td>
<td>1</td>
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<tr>
<td>5. More content could have been included.</td>
<td>1</td>
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<td>6. The topics in the program fit together to make a coherent program.</td>
<td>1</td>
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<td>7. The seminar schedule of activities was well designed.</td>
<td>1</td>
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<td>8. The Knapp House should be retained in future seminars.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>9. The smorgasbord should be retained in future seminars.</td>
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<td>10. The instructional materials facilitated learning.</td>
<td>1</td>
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<td>11. There was sufficient opportunity for individualized discussions with the instructors</td>
<td>1</td>
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<td>12. There was a lack of group interaction.</td>
<td>1</td>
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<td>13. The skills learned during this seminar will be useful on my job.</td>
<td>1</td>
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<td>14. The instructional team has a thorough knowledge of their topics.</td>
<td>1</td>
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<td>15. The instructional team was courteous and helpful to the participants.</td>
<td>1</td>
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<td>16. The instructional team was well organized.</td>
<td>1</td>
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<td>17. I experienced teaching techniques which were new to me.</td>
<td>1</td>
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<td>18. The food was very good.</td>
<td>1</td>
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<td>19. In general, presentations were difficult to understand.</td>
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<td>20. There were too few topics covered during the week.</td>
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<td>21. The seminar was too long.</td>
<td>1</td>
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</tbody>
</table>
1. What did you like most about the Seminar?

2. What did you like least about the Seminar?

3. Additional comments and suggestions:
Mr. Marvin Schrader  
Curriculum Specialist  
Lakeshore District  
933 Erie Ave.  
Sheboygan, Wisconsin  53081

Dear Mr. Schroder:

Thank you for your involvement in the Seminar for Curriculum Specialists held at the Center for Vocational, Technical and Adult Education.

In reviewing the seminar, we aimed to provide some insights into interpersonal or person-handling skills appropriate to your position and to provide some guidelines for the curriculum and instructional development processes. To assist the Center for VTAE in planning future activities to meet your needs, I would appreciate your reaction to the following comments.

At the risk of oversimplifying your role, I have identified three elements or processes which we can represent systematically:

1. The procedural processes of designing new programs, meeting with advisory committees, etc.

2. The curriculum development process which may be used as a rationale for the procedural process.

3. An instructional development process which forms a rationale for working with individual teachers.

As a topic for a future seminar, I would suggest that you might consider the instructional development process. In particular, I am suggesting the method of selecting and prescribing appropriate instructional strategies and matching these strategies with media alternatives. This, in my opinion, may also provide you with a basis for isolating competencies for the in-service training of the teaching staff.

Researchers have identified a classified twenty-seven instructional strategies in the cognitive domain and eighteen in each of the affective
and psychomotor domains. These in turn have been matched with media alternatives. The whole process successfully field tested for four years at the high school level and is now beginning to be applied to colleges and universities.

At this stage I would appreciate reactions to the three elements or processes which I previously mentioned. Are they readily identifiable in your situation? If so, can you put one or more of these processes on paper in a diagramatic form and mail it to myself, or Dr. Orville Nelson at the Center for Vocational, Technical and Adult Education.

This information would help us design a starting point for a seminar on the instructional development process.

Thank you once again for the courteous attention you gave me when I visited your Institute in May. I look forward to meeting you again in the future.

With best regards,

Geoff Saville

GS/jh

Enc.
July 24, 1973

Mr. James Tegtmeyer
Curriculum Specialist
Wakesha County Technical Institute
800 Main Street
Pewaukee, Wisconsin  53072

Dear Mr. Tegtmeyer:

Please find enclosed a copy of the materials distributed to participants at the Seminar for Curriculum Specialists held at the Center for Vocational, Technical and Adult Education at UW-Stout.

In reviewing the seminar we aimed to provide some insights into the interpersonal or people-handling skills appropriate to your position and provide some guidelines for curriculum and instructional development processes.

I have suggested to the participants in the June seminar, that we would appreciate their reaction to the following suggestion. That the instructional development process be the basis for a future seminar and in particular the method of selecting and prescribing instructional strategies and matching these strategies with media alternatives.

Researchers have identified and classified twenty-seven instructional strategies in the Cognitive Domain and eighteen in each of the Affective and Psychomotor Domains. These, in turn, have been matched with media alternatives. The whole process has been successfully field tested at the high school level and is now beginning to be applied to colleges and universities.

At this stage I would appreciate your reactions to this suggestion. Please address your replies to myself or Dr. Orville Nelson at the Center for Vocational, Technical and Adult Education.

Sincerely yours,

Geoff Saville

GS/jh
July 3, 1973

Mr. Clifford Zenor
Curriculum Consultant
Wisconsin Board of Vocational, Technical and Adult Education
Hill Farms State Office Building
4802 Sheboygan Avenue
Madison, Wisconsin 53702

Dear Mr. Zenor:

I am enclosing copies of the Participant's Opinionnaire from the Curriculum Specialists Seminar for your information.

Thank you for your support and assistance during the Seminar. The use of the word "interesting" in my closing remarks on Thursday was obviously an understatement. I was quite excited to see the participants moving through the phases of Clarification, Evaluation and Decision with respect to their roles as Curriculum Specialists. Although the Seminar was planned to provide this continuity, there is always an element of uncertainty associated with the outcome.

The logical follow-up to this Seminar as I mentioned on Thursday, is to have each participant submit a curriculum development model applicable to the needs of the district. One area of weakness in my opinion is the formal/informal evaluation process which allows the teacher and curriculum specialist to follow through on developing, evaluating and revising a program or course. Another area of weakness is the problem of differentiating curriculum development process from procedural duties associated with preparing new program proposals.

I look forward to discussing these implications with you in the future.

Sincerely yours,

Geoff Saville
Project Director
Curriculum Specialists Seminar

GS:po
Enclosure
Appendix C

Response to Seminar
Response to Follow-up Letters
July 20, 1973

BEST COPY AVAILABLE

Mr. Geoff Saville
Project Director
Curriculum Specialist Seminar
Center for Vocational, Technical and Adult Education
Applied Arts Building
225 I
University of Wisconsin-Stout
Menomonie, Wisconsin 54751

Dear Geoff:

I would like to thank you for the fine job you did in planning and implementing the Curriculum Specialist Seminar held at the University of Wisconsin-Stout, June 26, 27 and 28, 1973. I felt it was a tremendous experience for all who were involved both participants and presenters. I feel the group gained considerable insight into the way they relate to people, whether in groups or as individuals, and they gained a better understanding of themselves. All of this along with the opportunity to look at approaches to the role they play within their district, I am sure is going to be extremely valuable to them when they return to their respective districts. All of this took place because of the conscientious leadership you gave to the presenters.

In looking at the evaluation sheets from each of the participants I am very pleased with the comments they made and I am sure it must have been a great reward to you. This seminar is the second step in the plan to the team approach for curriculum development you and I have discussed which I hope to see implemented within each of the vocational districts. Each of the people in attendance has a tremendous job ahead of them and I know the seminar will be invaluable to them as they proceed in the future.

Again, my thanks to you for a fine job and my best to you as you and your family move on to your destination in Michigan. I hope it is a rewarding experience and you have the opportunity to gain the knowledge that you are seeking.

Sincerely,

Clifford Lennor
Vocational Education Consultant
Instructional Services
July 13, 1973

Dr. Orville Nelson  
Center For Vocational Technical  
and Adult Education  
Applied Arts Building  
North Wisconsin/Stout  
Menomonie, Wisconsin 54751

Dear Dr. Nelson,

I wish to express my appreciation for the opportunity to share experiences with other vocational educators during the Seminar for Curriculum Specialists held June 26-28, 1973, in your school. The entire seminar was well organized, effectively conducted and a maximum amount of learning was achieved. I wish to thank all the Stout staff who gave of their time and effort to make this a successful program. Special praise goes to Mr. Geoff Seville for his perception, professional judgement, his attention to detail and organization and especially the many kindnesses he extended the group. It is hoped that activities of this nature continue at Stout.

Sincerely,

[Signature]

Dr. Spiro Mehail  
District Office of Instruction

DISTRICT 9 AREA BOARD OF VOCATIONAL, TECHNICAL AND ADULT EDUCATION

Ralph E. Bowes, Chairman  Mrs. Lillian R. Scola, Secretary  William E. Claypool  Albert G. Van Boxel  
Frank P. Zuerden, Vice-Chairman  John S. Randall, Treasurer  Dr. Richard P. Goussa
August 7, 1971

Mr. Geoff Saville
University of Wisconsin-Stout
Menomonie, Wisconsin 54751

Dear Mr. Saville:

It was a pleasure to be part of the Seminar for Curriculum Specialists. In answer to your request for information relative to our role in the field of curriculum, I am enclosing excerpts of our administrative information system. You will find that these flow charts include descriptions of input decisions and the outputs of each defined subsystem. I hope this material will be of some use to you.

Thanks again for the fine hospitality.

Sincerely,

Spiro M. Chail
Division of Instruction

Enclos.
**Brief Definition:** Develop and maintain policies and guidelines to maintain an effective level and quality of instructional teaching and non-teaching staff.

<table>
<thead>
<tr>
<th>Department</th>
<th>Key Personnel</th>
<th>Checklist</th>
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<td>District Office of Instruction</td>
<td>Mr. Alfon Mathison</td>
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<td>Asst. Dist. Director</td>
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Sign Off By Department Head: [Signature] 1/1/78
INSTRUCTIONAL RESOURCES -
CERTIFICATION

BEST COPY AVAILABLE

Problem: Certifying Teacher or Non-Teaching Professional

Yes

State or District Disagrees with Certification or has Found Incomplete Records

Problem Brings to the Attention of the Director of the Office of Instruction

Meeting Held with Personnel to Solve Problem

Personnel Department

Other Personnel as Required

Dean of Department Involved

Decision is Made, and Employee Relations Carries Out Results of the Decision

End of Information Flow
BRIEF DEFINITION: The mission of MATC is most specifically expressed in terms of its curriculum. This sub-system concerns itself with the exacting goals of preparing MATC's mission by providing students with usable skills in consonance with the changing needs of business, industry, government, and community. The criteria of this sub-system project the nature and needs of all MATC curriculums, including the needed resources in implementing the curriculum.

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<th>DEPARTMENT</th>
<th>KEY PERSONNEL</th>
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<tbody>
<tr>
<td>District Office of Instruction Curriculum</td>
<td>Dr. Spiro McHail</td>
<td>X</td>
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Sign Off By: Dr. Spiro McHail
**BRIEF DEFINITION:**

The Curriculum Development sub-system contains a structured series of individual learning options composed of programs of instruction that provide students with courses that are systematically arranged to produce 1) salable skills; 2) related technical information for occupational satisfaction; and 3) relevant general education for productive, democratic citizenship. This sub-system accommodates the projected need for courses and programs to serve specific numbers of students inclusive of the logistic requirements necessary for implementation.

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<tr>
<td>District Office of Instruction Curriculum</td>
<td>Dr. Spiro Mehail</td>
<td>X</td>
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**Sign Off By Department Head:**

Dr. Spiro Mehail

---

**Note:** The document appears to be a form or template, possibly for tracking or reporting purposes, with fields for department, key personnel, and sign-off by the department head. The form is not completely filled out, indicating it may be a draft or in progress.
**BRIEF DEFINITION:**
A course, whether it's part of a program of instruction or not, consists of a structured series of units of instruction which have behavioral objectives that specify skills and concepts necessary for learning mastery.

**DEPARTMENT** | **KEY PERSONNEL** | **CHECK ONE**
--- | --- | ---
District Office of Instruction Curriculum | Dr. Spiro Mehail | X

**Sign Off By**: Spiro Mehail
The services provided for the preparation of instructional materials range from supporting the instructor's "doing it himself" approach, providing a complete technical support of a professional production. Services include consultations on instructional design and copyright, editing, and productions via Typing, bindery, Printshop, Computer Center, Visual Communications Center, and the Television Station.

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<td>Florence Hester</td>
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<td>Dean of Apprenticeship and</td>
<td>Anthony Korowitz</td>
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<td>Graphic and Applied Arts</td>
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<td>Telecasting</td>
<td>Otto Schlaak</td>
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Copyrights

All Property
Material

Clear
Copyright
Copy

Contact
Publisher
By Letter

Clearance
Not

Yes

Contact
Publisher

No

End of
Information
Flow

Fee

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Author to Pay
or Not.

Pay Fee

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No

Yes

Decision By
Author to Pay
or Not.

Pay Fee

End of
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and Has All Rights
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Commercial
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Yes

MATS Shares
Royalty With
Author According
Agreement

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The original intent of this research was to find a concept which would reveal an optimum situation from which a facility design, a plan of operation, job descriptions for personnel, working relationships between personal and resource services could be determined. It was to be a discovery of what was assumed to exist. The research was inspired by a preconceived notion that some conceptual schema would be uncovered either in the writings of the past or from assessment of the present.

That this goal was not accomplished did not rule the research efforts a failure; for eventually it led to the discovery that the goal in its original form carried static overtones which discouraged the dynamism so important to the happenings in Moraine Park District. A determination of 'what is' could not capture the problem of providing so much learning to so many with so much at stake. Neither could it indicate the broad range of resources available for accomplishing the instructional task. It was of the utmost importance that the primary role of instruction be premised in the mission of Moraine Park District be re-emphasized and that it be so indicated in a concept that stressed a unified utilization of resources.

Moraine Park District is dedicated to preparing individuals for successful competition in a changing labor market. To accomplish this end, instruction is offered by level (Associate degree, one or two year
diploma, part-time or apprenticeship programs, etc.) and area (agriculture, home economics, health services, business and marketing, general education, trade and industry) to mirror the major social and economic trends that shape the occupational life of this nation. A commitment has been effected to provide instruction commensurate to the student's ability to learn, recognizing his educational preparation prior to enrollment. Apparent are the varied and numerous goals resulting from such a combination further multiplied when applied to a diversified student population encouraged to pursue individualized goals. The implications for the vast store of resources required to meet these goals are obvious. Moraine Park District although not oblivious to the importance of instructional resources must yet capture the strength that lies in building a total concept around the combined services to totally facilitate human learning and the teaching-learning process. An attempt has been made to conceptualize this mission.

The working model which follows takes on systematic characteristics for utilizing resources; however, unlike the total systems approach which must have boundaries like the skin of an animal or geographical borders the Educational Resource Center suggested for Moraine Park District, possesses a visionary dimension. It captures every talent inherent in those touched by the center. The only boundaries for the Educational Resource Center are the limitations imposed by the creative talents possessed by the participants. Activities will not be generated because of people, equipment and the like but by desire and motivation to learn.
What goals are to be accomplished?

How, and under what circumstances will students seek to accomplish goals?

Needs, capabilities, and achievements in their efforts to reach a desirable level of competency with respect to specified objectives.

Focus upon student needs and capabilities to reach a desirable level of competency with respect to specified objectives.
Resources to facilitate learning: Data, people and/or things with which a person can interact in order to learn.

(1) Specifically designed

(2) Outside resources

Steps in process:

(1) Define objectives and select process.
(2) Choose appropriate learning experiences.
(3) Choose appropriate teaching-learning format.
(4) Select appropriate physical facilities.
(5) Define and assign personnel roles.
(6) Select materials and equipment.
(7) Evaluate and improve the process when the cycle is repeated.

Finally the Resource Center which serves Moraine Park District will be likened to a dynamo which expends a continuous source of energy emitting a regular flow of learning activities. The regulated motion once established may alter in tempo or rhythm but never stop in fixed position or remain in a state of equilibrium.
Recommendations

The system for utilizing educational resources should be extended to include all vocational-technical districts in Wisconsin in order to strengthen the system as a whole.

Joint meetings of resource specialists should be held to share common problems and/or to develop commonalities among the various specialties.

A glossary of terms should be developed to facilitate communication among resource specialists.

Evaluation techniques should be refined to measure the effectiveness and efficiency of Educational Resource Centers.

Technology should be the servant and not the master of instruction. It should not be adopted merely because it exists, or because an institution fears that it will be left behind the parade of progress without it.

Two tests should be applied in deciding whether any technology (including conventional modes) is to be used or not:

(1) The teaching-learning task to be performed should be essential to the course of instruction to which it is applied.

(2) The task to be performed could not be performed as well—if at all—for the students served without the technology contemplated.
Appendix D

Selected Materials Developed for the Seminar
June 27, 1973

Presentation to Curriculum Specialist Seminar

1:00 to 2:10 p.m.
Room 219 A.A.

Learning and Teaching Styles
John Banks

Introduction

A student's learning style has been identified as one of the many variables that interact within an individual while engaged in learning. Many researchers within the last few years have attempted to explore and evaluate a student's learning style. The presentation today will present material and information based on research conducted at UW-Stout and Fox Valley Technical Institute this past school year.

General Information

All of us have engaged in various learning activities throughout our lives. We have either been learners or presenters of learning concepts to others. Many times we have often felt we were not enjoying or comprehending the concepts because it wasn't presented to us in a manner that we preferred. Based on our research we have formulated this definition of learning style: Consistent patterns of behavior or activity preferred and employed by the individual to effectively and efficiently acquire knowledge, skills and attitudes. The attempt in this study was to develop evaluation techniques and procedures to reliably determine an individual's learning style.

Group Participation

I. Members of group are to write in space allowed learning styles that they feel most secure or comfortable with in a learning situation.
II. Administration of Learning Style Attitude Opinionnaire

Found in this booklet of materials is a sample of the learning styles attitude instrument developed in this study.

Instrument Explanation - Visual Presentation

1. Definitions - Concrete/Symbolic Learning Style
   Structured/Un-Structured Learning Style

II. Matrix -

III. Determination of your learning style based on your response to Attitude Instrument. Scoring procedures to be explained by presenter. As presentation is made score your own test responses.

1. Questions

Visual display of Research Results - Visual Presentation

1. Graphs of groups showing how they placed on the learning styles continuum.

II. Reliability -

III. T and Standard deviation interpretation.

IV. Scatter Graphs of each group indicating learning style placement.

Closing Remarks

1. Thank to school people

II. Questions
Philosophy on How You can Make This Work

Orv Nelson

I. What is evaluation

A. Free Response - Categorize by:

B. Definitions

1. Evaluation
2. Decision making
3. Judgment
   a. Measurement
   b. Information
   c. Criterion norms or baseline

C. Develop the point that evaluation is a service activity - carried out to provide data for decision making.

II. Context for generating evaluation system(s)

A. Emphasize that evaluation is carried out to gather data, identify norms and criterion indices for making relevant decisions. Need a guide to direct our evaluation. I.E. What is the context for relevancy?

B. How can we identify relevant decisions in the realms of curriculum and instruction?

1. The curriculum development model (a system) will nicely serve this purpose.

C. Have group outline their model.

1. Elements and interrelationships
2. Context

D. Identify decisions to be made

E. Need data and criterion measures for these types of decisions. What kind of an evaluation system can we use. Lead into general evaluation model.

F. General evaluation model

1. Context: Inputs → Transactions → Outputs
a. For each system we have objectives - outputs
b. Each system elements - inputs
c. Each system has interactions - transactions

2. Outputs are judged on the basis of the relationship between actual outputs and the outputs defined in your objectives. Decisions also take into account the context within which the system operates.

3. Output dimensions of concern suggest the transaction and inputs data to collect.
   a. Example: Output of competent draftsmen suggests
   b. Transactions: Quality instruction including attention to learning styles
   c. Inputs: Characteristics of students, staff and program.
   d. Context: Type school system and its philosophy

4. Our basic or prime output is what? (qualified graduates)
   a. Work back from this point to determine transactions and inputs.
   b. Note that there is an evaluation sub-system for each sub-system in your curriculum development model (come back to this).
   c. Generate decisions related to the evaluation sub-system for graduates from vocational-technical programs.
      (1) Main output is successful graduates on jobs for which they were trained.
      (2) Inputs are students, teachers, facilities, instructional materials, courses, etc.
      (Show my 5 decision areas. Apply model of curriculum coordinator role.)
      (3) Transactions are interactions between these elements including learning styles etc.
      (4) Context - environment within which (1), (2) and (3) operate. For example, job market.
      (5) Note how we could evaluate the curriculum development process as well.
   d. List data appropriate to decisions related to (1), (2), and (3) above.
   e. Identify criteria or norms for these data (d).
f. Show how decisions can be made based on the data from these three areas. Identify data.

(1) Decide if a program is producing qualified graduates

(2) Decide if a program is relevant based on graduate's experiences

(3) Decide if a program is efficient

5. Delineate other sub-systems in the evaluation model to parallel the curriculum development model.

a. Note the links between sub-systems.

b. Note the value of the sub-systems in delineating manageable evaluation tasks.

6. Link graduates' criticisms or problems back through each of the evaluation sub-systems. I.E. Placement problems may be caused by an incorrect decision in the first sub-system of your curriculum development model.

a. Work back from graduating outputs.

7. Show my 5 decision areas in curriculum and interaction model.

III. Move into the evaluation of the curriculum development sub-systems and the curriculum coordinators role. Suggest evaluation for this point. I.E. What objectives and strategy for your job.

<table>
<thead>
<tr>
<th>Program Identification</th>
<th>Task Analysis</th>
<th>Generation of Competencies and Objectives</th>
<th>Developing Instructional Systems</th>
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Curriculum coordinator's role = facilitator and resource person.

A. Take example of - goal: develop an effective individualized auto mechanics program (output).

1. In order to attain this you would need:

   a. Qualified instructors to develop the content

   b. A-V specialist

   c. Research specialist
d. Curriculum specialist

e. These are inputs

2. To make it effective you decide that you must have ego involvement of the instructors. Thus, you must have teachers perceive that they carried the lead role. You decide to use the following group structure:

```
  T1
 /   \
|     |
|     |
T3   T2
```

Specialists are ancillary

a. Note how the curriculum specialist made decisions 1 and 2 - i.e. based on their role perception.

3. What types of data will you need to:

a. Verify your decisions

b. Determine progress of the group

   (1) Bales' analysis -------

   a. Clarification
   b. Evaluation
   c. Decision

IV. Some general concerns in evaluation

A. Validity

B. Reliability

C. Data management

V. Overview

A. What is evaluation?

B. Role of curriculum model

C. Role of the model role of curriculum coordinator

D. Generation of general evaluation model for your curriculum system.
The Bales System, developed by R. F. Bales of Harvard University, is the most celebrated method of observation for studying group behavior. Bales's 12-category system for classifying group behavior is extremely useful, easy to use, and applicable in a large number of situations. His system provides a number of insights into the function and operation of discussion groups.

Bales classified all behavior as either task or human-relations oriented and that groups work through three phases before solving its problem. These phases are clarification, evaluation, and decision. Clarification is a period of uncertainty as to what the facts are, a period when necessary assumptions are made, and a definition of the situation is created. Evaluation is a period for different feelings to be expressed in regard to different aspects of the problem. The group attempts to establish some consensus in terms of value judgments during the evaluation period. Finally, in the phase of decision the group sets out to specify solutions to their problems.

If one takes a close look at Bales System, you will find that certain patterns emerge. Groups spend about a quarter of the time on positive human relations activity and about 10 percent on negative human activity. What this actually means is that a small proportion of time is taken up by people asking for suggestion, opinion, and orientation. Attempted answers take up almost half the time. On the human relations side, positive responses are twice as common as negative reactions. If the human relations balance was not of this order, the group would probably disintegrate.

Bales analyzed the discussion of small groups in terms of who speaks to whom, or the way participation is distributed among the members of the group. Bales recorded who spoke for how long, and to whom. Analysis of these who-to-whom matrices shows that each man receives back about half as much as he puts out; the people who speak the most speak more to the group as a whole and less to individuals, whereas people who speak less speak more to individuals and less to the group. The size of the group also plays an important part. As a group grows larger, top men speak more to the group as a whole and communication centralizes around the leader.

As has already been noted, two basic roles emerge in discussion groups, the task specialist and the human relations specialist. The role of the scape-goat also emerges from the group. The task specialist is the man with the best ideas and he also gives the most guidance. He works at the task which structures the behavior and attitudes of the group and frequently makes the people anxious and disturbs the equilibrium of the group. This anxiety is usually directed toward the scapegoat. The human relations specialist plays an important part at this time because he usually has a very warm and receptive personality, enabling him to smooth things over without diverting the group too much from its primary purpose. When a group has been structured with task and human relations specialists, it is very difficult for the lesser members to revolt.

Bales system is a very powerful technique and has been very useful because of its high reliability, validity, and utility. Bales work is outstanding because it answers the questions, "What happens in a discussion group?"
### The Bales System

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<th>Action</th>
<th>Description</th>
<th>Task Type</th>
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<tr>
<td>Agree</td>
<td>+ 1. Shows solidarity</td>
<td>(a) HUMAN RELATIONS</td>
</tr>
<tr>
<td></td>
<td>2. Shows tension</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Agrees</td>
<td></td>
</tr>
<tr>
<td>Answer</td>
<td>+ 4. Gives suggestion</td>
<td>(b) TASK</td>
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<tr>
<td></td>
<td>5. Gives opinion</td>
<td></td>
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<tr>
<td></td>
<td>6. Gives orientation</td>
<td></td>
</tr>
<tr>
<td>Ask</td>
<td>- 7. Asks for orientation</td>
<td>(c) TASK</td>
</tr>
<tr>
<td></td>
<td>8. Asks for opinion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Asks for suggestion</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>- 10. Disagrees</td>
<td>(d) HUMAN RELATIONS</td>
</tr>
<tr>
<td></td>
<td>11. Shows tension</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Shows antagonism</td>
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**Group Behavior**
Ranking Some Aims of Education

I. You must work as a group.

II. Do not choose a formal discussion leader.

III. Record the rating as the group decides upon it.

(  ) Society is held together by right behavior. Education should teach people to be good, honest, and upright human beings.

(  ) Man is happiest when he knows he has done a skillful job. People should be taught things that will help them do their work better.

(  ) Knowledge should be valued for its own sake because in knowledge there is wisdom. Education should teach those things that have been found to be true for all people for all times.

(  ) The family is most important. Education should teach one to be a more able and responsible family member.

(  ) In these times, when we must all work together to build our country, education must teach us first and foremost to be informed, reliable, and cooperative citizens.

(  ) Now after all the talk is over, we must admit that it is natural for men to want a reasonably comfortable way of life and a share of the good things they deserve. Education should primarily be planned to bring a man money and success.

(  ) If our nation is to go ahead, our people must start by knowing and understanding their own historical and cultural roots. Education should teach us about our past--what parts of it help and hinder us now.

(  ) Freedom means choice. A man with no education may believe all or nothing he hears or reads. But education should teach him how to make intelligent choices in all areas of his life.
Charles Schwab, one of the first presidents of Bethlehem Steel Company, once told systems improvement expert Ivy Lee:

"If you can give us something to pep us up to do the things we know we ought to do, I'll gladly pay you anything within reason that you ask."

"Fine," answered Lee. "I can give you something in 20 minutes that will step up your 'doing' by at least 50 per cent."

"Okay," said Schwab. "Let's have it."

Lee handed Schwab a blank sheet of note paper and said: "Write down the six most important tasks you have to do tomorrow, and number them in the order of their importance. Now, put this paper in your pocket and the first thing tomorrow morning look at item one and start working on it until it is finished. Then tackle item number two in the same way; then item three, and so on. Do this until quitting time rolls around."

"Don't be concerned if you have finished only one or two. You'll be working on the most important ones. The others can wait. If you can't finish them all by this method, you couldn't have with any other method either, and without some system, you'd probably not even have decided which was the most important."

"Do this every working day. After you have convinced yourself of the value of this system, have your people try it. Try it as long as you wish, and then send me a check for what you think it is worth."

Some time later, Schwab sent Lee a check for $25,000 with a letter saying the lesson was the most profitable he had ever learned. In five years, this plan was largely responsible for turning the unknown Bethlehem Steel Company into the biggest independent steel producer in the world.

And it helped to make Charles Schwab 100 million dollars and the best-known steel man in the world.

What worked for Schwab can work for you. Try it! It may revolutionize your entire life.
T-P LEADERSHIP QUESTIONNAIRE

The following items describe aspects of leadership behavior. Respond to each item according to the way you would be most likely to act if you were the leader of a work group. Circle whether you would be likely to behave in the described way always (A), frequently (F), occasionally (O), seldom (S), or never (N).

If I were the leader of a work group . . . .

A F O S N 1. I would most likely act as the spokesman of the group.
A F O S N 2. I would allow members complete freedom in their work.
A F O S N 3. I would encourage the use of uniform procedures.
A F O S N 4. I would permit the members to use their own judgment in solving problems.
A F O S N 5. I would needle members for greater effort.
A F O S N 6. I would let the members do their work the way they think best.
A F O S N 7. I would keep the work moving at a rapid pace.
A F O S N 8. I would turn the members loose on a job, and let them go to it.
A F O S N 9. I would settle conflicts when they occur in the group.
A F O S N 10. I would be reluctant to allow the members any freedom of action.
A F O S N 11. I would decide what shall be done and how it shall be done.
A F O S N 12. I would push for increased production.
A F O S N 13. I would assign group members to particular tasks.
A F O S N 14. I would be willing to make changes.
A F O S N 15. I would schedule the work to be done.
A F O S N 16. I would refuse to explain my actions.
A F O S N 17. I would persuade others that my ideas are to their advantage.
A F O S N 18. I would permit the group to set its own pace.

T______ P_______
LEADERSHIP-MOTIVATING STYLES

1. Teller
   A. Subordinates are extension of his limbs and senses.
   B. Tells subordinates what, who, when, where, and how - not why.
   C. Supervises closely, allows little deviation from prescribed pattern.
   D. Traditional and still most common form used throughout the world.
   E. Expert knowledge of the job.

2. Seller
   A. Subordinates are extensions of his brain as well as his limbs and senses.
   B. Uses motivational techniques to make subordinates want what he wants.
   C. Delegates responsibility as well as authority.
   D. Tells subordinates why, as well as how.
   E. Promotes team spirit, inspires loyalty and enthusiasm.
   F. Expects subordinates to want what he wants.
   G. Details and people.

3. Consultant
   A. Counsellor - coach.
   B. Assumes subordinates are highly competent professionals.
   C. Assumes subordinates are fully motivated to complete task.
   D. Checks subordinates' progress periodically, gives helpful suggestions and encouragement - door is always open.
   E. Puts minimal limitations on subordinates in their methods of operation.
   F. People and details.

4. Joiner
   A. First among equals - one of the boys.
   B. Leads by example.
   C. Allows all to have a voice in decisions.
   D. Makes decisions on strength of commitment.
   E. Takes all responsibility but allows subordinates much authority.
   F. Spending time working with people.
   G. Group is considered a resource, not a tool.
THE OPEN MINDED APPTITUDE TEST

1. If you went to bed at 8:00 p.m. and set the alarm to get up at 9:00 a.m., how many hours sleep would this permit you to have?

2. Do they have a 4th of July in England?

3. How many birthdays does the average man have?

4. Why can't a man living in Winston Salem, N.C., be buried west of the Mississippi River?

5. If a doctor gave you three pills and told you to take one every half hour, how long would they last you?

6. Some months have 30 days, some have 31, How many months have 28 days?

7. If you had only one match and entered a room in which there was a kerosene lamp, an oil stove, and a wood burning heater, which one would you light first?

8. A man builds a house with four sides to it, and it is rectangular in shape. Each side has a southern exposure. A big bear comes wandering by. What color is the bear?

9. How far can a dog run into the woods?

10. How much dirt in a hole 2" deep and 2" in diameter?

11. What is the minimum number of active baseball players "on the field" during any part of an inning? How many outs in each inning?

12. I have in my hand two U.S. coins which total 55c in value. One is not a nickel. Please bear that in mind. What are the coins?

13. A farmer had 17 sheep. All but nine died. How many did he have left?

14. Divide 30 by 1/2 and add 10. What is the answer?

15. Two men played checkers. They played five games and each man wins the same number of games. How can you figure this?

16. Take two apples from three apples and what do you have?

17. An archaeologist claimed he found some gold coins dated 46 B.C. Do you think he did?

18. A woman gives a begger 50c. The woman is the beggar's sister, but the beggar is not the woman's brother. How come?

19. How many animals of each species did Moses take aboard the ark with him?

20. Is it legal in North Carolina for a man to marry his widow's sister?
21. What word is misspelled in this test? ____________________________

SCORING:
- 16 and up correct -- Genius
- 10 thru 15 correct - Normal
- 8 and 9 correct --- Sub-normal
- 5, 6 and 7 correct- Idiot
- 1 thru 4 correct -- Sub-idiot
Management by Objectives

Guidelines for Goal-Setting

a) Objectives must be defined in terms of results or conditions to be achieved - not activities to do.

b) Objectives should be written so that they can be analyzed and reviewed from time to time.

c) Written objectives should start with an action term such as achieve, complete by, replace, convince, etc.

d) Objectives must have an accountability assignment.

e) Objectives newly formulated should be set in the light of past experiences.

f) Objectives should be stated in positive terms such as "what to do" rather than negative terms as "what to avoid."

g) Objectives should be concise statements without complex and elaborate descriptions.

h) Objectives should cover a single-ended result and not a number of commitments.

i) Objectives that have been changed or modified must be recommmunicated with the involved managers.

j) Objectives must be realistic to the resources, facilities, and skills that are available.

k) Objectives when listed should be prioritized to give a sense of importance and value to the company.

l) Objectives completed should be documented to give "performance experience" for future goal setting.

m) Objectives must be significant, critical and important to the individual and the company.

n) Objectives written with quantifiable terms are easily measureable and hence easily reportable.
Format for Individuals Goals

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Activity</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Management by Objectives

The MBO Cycle

1. As the superior, lead your unit in establishing overall unit objectives and guidelines. Identify common unit goals and related acceptable levels of performance.

2. Obtain commitment from unit members to overall objectives, guidelines and common goals.


4. Require each subordinate to prepare his own goals with results expected and target dates.

5. Prepare a written set of goals for each subordinate for reporting directly to you.

6. Meet privately with each individual subordinate reporting directly to you. Discuss the individual goals and gain mutual agreement on a final listing of goals and target dates.

7. Through informal review methods determine the directional and quantitative nature of subordinate performance results.

8. At pre-determined periodic times, formally review with each subordinate the nature of his results compared to established goals and anticipated results.

9. Near cycle-end, meet with each subordinate to formally review his performance cycle, comparing his results with the most recent draft of goals.

(Use stage #9 as foundation for beginning new cycle)

(Feedback)

(Feedback and Change)
Professional Development

Applied Research

Needs Identification

Dissemination of research results

CVTAE

Center for Vocational, Technical and Adult Education UW-Stout Menomonie, Wisc. (5475
Model Selection Interview

THIS INTERVIEW IS AN ATTEMPT TO UNDERSTAND YOU BETTER BY LOOKING AT YOUR BACKGROUND AND PERCEPTIONS REGARDING YOUR PROFESSIONAL AREA.

1. Tell me about the experiences and feelings that caused you to become interested in this area.

2. What do you perceive as desirable personal qualities for someone in this position?

3. If I were to ask those who know you best what kind of a person you are, how would they describe you?

NOW I'M GOING TO REALLY SHIFT GEARS ON YOU AND CHANGE THE FORMAT OF THIS INTERVIEW

I'M GOING TO PRESENT YOU WITH SOME SITUATIONS THAT HAVE OCCURRED IN VOCATIONAL, TECHNICAL AND ADULT EDUCATION SETTINGS. YOU MAY OR MAY NOT HAVE HAD EXPERIENCE WITH THESE SITUATIONS. YOUR JOB IS TO RELATE EVERYTHING THAT YOU SEE AS BEING IMPORTANT IF YOU SHOULD FIND YOURSELF REPRESENTING OUR SCHOOL IN THIS SITUATION.

1. "Task analysis: Instructional media: Planning and implementation, Balony! Just give me a shop and some kids who want to learn," says your grizzled old veteran welding instructor.

2. You are confronted by an irate employer who angrily states, "Your program isn't worth a d---! I hired one of the guys you supposedly trained and he didn't know his backside from a hole in the ground!"

3. A guy who quit school ten years ago stops in.

4. You overhear an advanced student telling a newcomer that the technical courses are the only ones that really count. "The general education courses are just so much junk they make you wade through," he says.
Model Selection Interview Rating Scale

Level I  I would try to avoid any kind of relationship with this individual.

Level II  If there were no alternatives, I might talk to this individual about matters of a factual nature concerning his field, but I would avoid personal interaction.

Level III  I feel this person is reasonably sound in matters concerning his specific field and I might be able to interact with him personally in matters related to that area.

Level IV  This person appears to be pretty knowledgeable in the areas of professional concern to the institution and in addition, I feel I could relate to him personally in most situations.

Level V  This individual has a strong broad-based professional knowledge and would be easy to consult with. I also feel he is personally concerned about me as a person.

* No half step ratings allowed.

Instructions for Rating:

1. Listen to each segment as if you were the person (lazy guy, drop-in, irate employer, etc.). Try to feel as you think they would.**

2. On the basis of the applicant’s response indicate the degree (using the scale above) to which you yourself would seek to relate to this person in this situation.

** Put yourself in the position of one of these people attempting to relate to an individual representing your institution. Acknowledging that a staff member in a setting such as yours needs a solid foundation of professional knowledge and a degree of personableness sufficient to enable him to relate successfully to students and staff, how willing would you be to have him on your staff?
<table>
<thead>
<tr>
<th>Major Decisions in Curriculum &amp; Instruction</th>
<th>Examples of Types of Evaluation Data Needed</th>
</tr>
</thead>
</table>

1. To what needs should our school attend?
   - 1.1 Problem analyses
   - 1.2 Critical incidents
   - 1.3 Philosophical basis of the school
   - 1.4 Specification of needs
   - 1.5 Delphi projections

2. What programs should our school offer?
   - 2.1 Correlation between needs and suggested programs
   - 2.2 Feasibility
   - 2.3 Cost/Benefit
   - 2.4 Student interests
   - 2.5 Advisory committee recommendations

3. What capabilities and competencies should the graduates of these programs have?
   - 3.1 Task analysis
   - 3.2 Advisory committee recommendations
   - 3.3 Industry surveys
   - 3.4 Feedback from follow-up studies
   - 3.5 Jury of experts
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.</strong> What learning resources should be used to develop these competencies?</td>
<td>4.1 Conditions defined by behavioral objectives</td>
</tr>
<tr>
<td></td>
<td>4.2 Student abilities</td>
</tr>
<tr>
<td></td>
<td>4.3 Learning styles</td>
</tr>
<tr>
<td></td>
<td>4.4 Media available</td>
</tr>
<tr>
<td></td>
<td>4.5 Teacher competencies</td>
</tr>
<tr>
<td><strong>5.</strong> Did instruction carry out the intents of the curriculum prescriptions?</td>
<td>5.1 Student achievement</td>
</tr>
<tr>
<td></td>
<td>5.2 Diagnostic test data</td>
</tr>
<tr>
<td></td>
<td>5.3 Teaching Diaries</td>
</tr>
<tr>
<td></td>
<td>5.4 Student ratings of instruction</td>
</tr>
<tr>
<td><strong>6.</strong> Do our graduates have appropriate competencies?</td>
<td>6.1 Follow-up students</td>
</tr>
<tr>
<td></td>
<td>6.2 Follow-up employers</td>
</tr>
</tbody>
</table>
Appendix E

Contribution of the Research Project to the Convergence Plan Developed for the Wisconsin VTAE System
Figure 3: Linear Array - Phase 1: Identification and Analysis of Needs
Figure 4: Linear Array - Phase II: System Design (Planning and Development)
Figure 5: Linear Array — Phase III: Sub-system development, Pilot and Field Testing
<table>
<thead>
<tr>
<th>Step 1: Distill Implementation and Integration model</th>
<th>Step 2: Select Implementation Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 3: Place sub-system(s) in operation</td>
<td>Step 4: Evaluate Implementation, Integration and output</td>
</tr>
<tr>
<td>Step 5: Revise sub-system(s) to improve Integration</td>
<td>Step 6: Disseminate revised sub-system(s)</td>
</tr>
</tbody>
</table>

Figure 6: Linear Array - Phase IV: Implementation and Integration
Figure 7: Linear Array - Phase V: Evaluation
Level of Research Activity

Sample Activities at Each Level

<table>
<thead>
<tr>
<th>Phase</th>
<th>Phase I: Identification and Analysis of Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step</td>
<td>Step 1: Identify Needs</td>
</tr>
<tr>
<td>Sub-Flow</td>
<td>Sub-Flow 1: Identify manpower Needs (1-1-1A)</td>
</tr>
<tr>
<td>Problem</td>
<td>Obtaining Valid Job Market Data (Problem 2 in Research Problems Survey)</td>
</tr>
<tr>
<td>Projects</td>
<td>Potential Projects</td>
</tr>
</tbody>
</table>

1. Relationship between newspaper ads and manpower needs
2. Geographical area in which students acquire first job as an indice of manpower needs
3. Determination of geographical area to be used in projecting manpower needs.

Figure 9: Relationships Between Phases, Steps, Sub-Flows, Research Problems, and Research Projects
Appendix F

Researcher's Vita
RESEARCHER'S VITA

Geoffrey G. Saville
College of Education
Erickson Hall, 305
Michigan State University
East Lansing, Michigan 48823
Phone [517] 355-7347

Born: August 13, 1938, Lismore, N.S.W., Australia

Family:
Wife: Monica, former elementary school deputy principal
Children: Gillian - 5, Carolyn - 3

Present Position:
Lecturer in Industrial Arts (on study leave)
Sydney Teachers' College
University Grounds
Newtown, 2042 New South Wales, Australia

Education:
Ed.S. (Industrial and Vocational Education), U.W.-Stout, 1973
M.S. (Industrial Education), U.W.-Stout, 1972
B.S. (Technology) University of New South Wales, 1970
Graduate Study (Education) University of Sydney, 1958
A.S.T.C., N.S.W. University of Technology, 1957

Instructional Experience:
Sydney Teachers' College, Lecturer in Industrial Arts, 1969 to 1972.
(Woods, Metals, Drafting, Teaching Methods, Elementary I.A.)
Selective Metropolitan High School teaching an innovative Senior High
School Curriculum, (History of Technology, Materials Science,
Mechanics, Graphics, Math.) 1968-1969
(Materials Science, History of Technology, Mechanics, Drafting, Math)
Metropolitan High School teaching Woods, Metals, Drafting and Math
Promoted to List 2 (Dept. Chairman), 1964-1966
Rural Comprehensive High School teaching Woods, Metals, Drafting
Promoted to List 1, 1959-1963

Industrial Experience:
Assistant Surveyor, Draftsman, North West County Council, N.S.W.
3-month summer sessions for 4 years, surveying power lines, a water
retriculation system for a thermal power station, preparation of

Organizational Experience:
N.S.W. Higher School Certification Examination, (University Entrance
N.S.W. School Certificate Examination, (Technical College Entrance
Metropolitan West School Examinations, Examiner or Assessor for Junior
and Senior High Schools, Woods, Metals, Drafting, Materials Science.
Coordinator of State S.C.E. Examinations (Industrial Arts)
Consultant to H.S.C. Curriculum Committees, Program Chairman of
In-Service Training, 1966
South Western N.S.W. Industrial Arts Conference, Program Chairman,
Sectional Speaker, 1962

Research and Publications:
Ed. S. Field Study - "Curriculum Specialists Seminar" University of
Wisconsin-Stout, Center for Vocational, Technical and Adult
Education, 1973
M.S. Thesis - "Managing the Enterprise - An Educational Simulation
"Technological Films - Research Publication No. 4", Sydney, Australia,
Sydney Teachers' College, 1972 (co-author)
"The Industrial Arts Bulletin", Sydney, Australia, N.S.W. Government
Printer, 1966-1972, Editor and contributor of articles on Powder
Metallurgy, Building Materials, Curriculum Innovations.
"The Industrial Arts Journal of Australia", Sydney, Australia:
Institute of Industrial Arts, A series of four articles on curri-
"Metals Australia", Australian Institute of Metals. A series of
Graduate Study (Education) Thesis: "The Philosophical, Sociological
and Psychological Implications of the Wyndham Core Curriculum for
New South Wales Secondary Schools" University of Sydney - 1958

Professional Organizations:
The University of New South Wales Union - Life Member
The University of Sydney Union - Life Member
Australian Institute of Metals, Sydney Branch.
Institute of Industrial Arts of Australia - Foundation Member
South Pacific Association on Teacher Education
Colleges of Advanced Education Lecturers Association
American Council on Industrial Teacher Education
Wisconsin Industrial Education Association
Epsilon Pi Tau, Theta Chapter - Outstanding Member, 1972-73
American Vocational Association
Association for Educational Communications and Technology
World Future Society

Community Service:
Staff Hiring Committee, Family Learning Cooperative Nursery School,
Menomonie, 1972-73,
President, Apex International - Eastwood Club, 1971-72, "Apexian
of the Year" award, 1971-72, for service to the community.
Planning Committee of the $1 million 'Foundation 41' Appeal, 1971-72.
Promoter of the Australian Coin Week Exhibition, Sydney Town Hall, 1965
Member of the Board of Directors, Eastwood Apex, 1964-72
Chairman, Scottish Ball Committee, 1961-63
Congregational Treasurer, Member of the Board of Management, Presbyterian
Church, June, N.S.W., 1961-63.
University Service:

Graduate Student representative on the Committee for Curriculum and Instruction, University of Wisconsin-Stout, 1972-73

"Educational Games and Simulations"

Individualized Instruction Workshop, July 9-20, 1973
U.W.-Stout, Summer Session
"Educational Games and Simulations"
"Projective Techniques for Group Involvement"

Curriculum Specialist's Seminar, Project Director
Center for VTAE, U.W.-Stout, June 26-28, 1973
"Curriculum Development as a Group Problem Solving Activity"
"Curriculum Development Systems"

Professional Growth Week for Wisconsin VTAE Staff
Center for VTAE, U.W.-Stout, June 4-8, 1973
"Curriculum Development Systems"

Foundations of American Industry, March 8, 1973
U.W.-Stout Extension Services, Appleton, Wisconsin
"The Conceptual Structure of Management"

Students and Faculty, U.W.-Stout
Applied Arts Theater, March 13, 1973
"Australia in the Seventies"

Epsilon Pi Tau - Theta Chapter, U.W.-Stout
Professional Meeting, February 21, 1973
"Educating Inventors"

Industrial Education Club, U.W.-Stout, October, 1972
"Industrial Education in Australia"