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ABSTRACT

This applied project recognized the priority to identify, describe, and evaluate existing vocational education programs that are coordinated with the adult performance level (APL) competency based approach. Furthermore, the project supported the value of developing and testing one or more models for APL/vocational education interface. In order to satisfy the objectives of the project, two monographs were prepared and an APL Curriculum Materials Catalog was compiled which used three criteria for materials included in the catalog. In field testing the project's competency-based Adult Vocational Model, pre- and post-testing of the adult learners, using the Adult APL Survey, was performed. When the results of the pre- and post-test scores, using the t-test of correlated means, were analyzed, a difference at the .05 level of significance was revealed. The instructors who field tested the model expressed an overall favorable attitude toward infusion of APL material into their vocational subjects. As a result of their support, recommendations were made that this study be replicated using a wider representation of vocational areas. Findings of the study included the recommendations that the State-of-the-Art and the APL Curriculum Catalog be updated yearly because of the continuing development of APL programs and materials. (Author/CT)

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COMPETENCY-BASED ADULT
VOCATIONAL EDUCATION PROJECT

Final Report

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To: Mr. Woody Buchanan, Director, Adult Vocational Education,
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Mr. Bill Clayton, Third Party Evaluator, Pensacola Junior
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Your helpfulness and constructive criticism was sincerely appreciated.

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Abstract

Adult and postsecondary vocational education programs have been increasing in size and scope. This applied project recognized the priority to identify, describe, and evaluate existing vocational education programs that are coordinated with the adult performance level (APL) competency based approach. Furthermore, the project supported the value of developing and testing one or more models for APL/vocational education interface. In general terms, the project was intended:

- (1) to ascertain existing infusion or recent attempts to infuse the APL objectives into the existing vocational programs for adults.
- (2) to develop an APL Curriculum Catalog which describes APL materials that are available and currently in use in vocational programs.
- (3) to develop one or more models that can be utilized to guide the infusion of APL into adult and postsecondary vocational education programs.
- (4) to field test project research findings (especially model(s)) in exemplary programs and use appropriate assessments to determine the competency improvement in functional competencies identified by national APL studies.

In order to satisfy the objectives of the project, two monographs have been prepared: Adult Performance Level Instruction in Vocational Education Programs for Adults: A State-of-the-Art and A Model for the Infusion of Adult Performance Level Instruction With Adult and Post-Secondary Vocational Education.

An APL Curriculum Materials Catalog was compiled which used three criteria for materials included in the catalog. The criteria for APL materials included were: (1) effectiveness and thoroughness in presentation

of curriculum and techniques of implementation and (2) use in vocational education classes and (3) availability.

In field testing the project's competency-based Adult Vocational Model, pre and post-testing of the adult learners, using the Adult APL Survey, was performed. When the results of the pre and post test scores, using the t-test of correlated means, were analyzed, a difference at the .05 level of significance was revealed. The instructors who had tested the model expressed an overall favorable attitude toward the inclusion of APL material into their vocational subjects. Several instructors were making plans to incorporate many APL objectives as part of their regular instructional objectives. As a result of their support, recommendations were made that this study be replicated using a wider representation of vocational areas.

Findings of the study included the recommendations that the State-of-the-Art and the APL Curriculum Catalog be updated yearly to support the continuing development of APL programs and materials.

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While the APL studies, like the V-TECS project, have identified appropriate objectives and tasks to guide instruction for functional competence, further efforts are needed to utilize these concepts into a part of vocational programs for adults. To have more effective implementation of this approach, successful experienced-based models need to be developed and disseminated to postsecondary and adult vocational institutions.

Definitions of Terms

1. **ACTIVITIES** - in this case, the method, means or manner of procedure for accomplishing the stated objective
2. **ADULT PERFORMANCE LEVEL (APL) PROJECT** - a research process that identified competencies which are important to success as adults
3. **ADULT PERFORMANCE LEVEL (APL) SURVEY OF THE AMERICAN COLLEGE TESTING (ACT) PROGRAM** - the Adult APL Survey is an instrument from the American College Testing Program designed for diagnosis and evaluation of those competencies necessary for adult living. The Adult APL Survey is based on research conducted by the University of Texas at Austin Adult Performance Level Studies.
4. **DESIGNATOR** - objectives related directly to an area of knowledge and followed by a number. The tasks follow the objectives with the letter "T" used as the task designator, then followed by the number for that specific objective. Thus, the designator code "h-1, T-1" means Health Objective One, Task One.
5. **EVALUATION** - examine and judge; appraise: to ascertain or fix the value or worth of
6. **GOAL STATEMENT** - a broad description of the capability which the functionally competent adult should possess for that particular general knowledge area
7. **KNOWLEDGE AREAS** - the APL Study includes the five knowledge areas of Health, Consumer Economics, Community Resources, Occupational Knowledge, and Government and Law
8. **OBJECTIVES** - the objective is the fundamental building block of the APL description of competency. Each goal statement is defined by a series of intermediate-level requirements called objectives.

9. RESOURCES - something that can be turned to for support or help
10. TASKS - specific situation which reflects a requirement of the objective. Tasks are sometimes referred to as "enabling objectives".
11. V-TECS - an acronym for Vocational Technical Education Consortium.
For information on V-TECS, write:
V-TECS
c/o Southern Association of Colleges and Schools
195 Peachtree Street, NE
Atlanta, GA 30308

I. INTRODUCTION

Adult and post-secondary vocational education programs have been increasing in size and scope. This applied project recognized the priority to identify, describe, and evaluate existing vocational education programs that are coordinated with the adult performance level (APL) competency based approach. Furthermore, the project supported the value of developing and testing one or more models for APL/vocational education interface. In general terms, the project was intended:

- (1) to ascertain existing infusion or recent attempts to infuse the APL objectives into the existing vocational programs for adults.
- (2) to develop an APL Curriculum Catalog which describes APL materials that are available and currently in use in vocational programs.
- (3) to develop one or more models that can be utilized to attempt the infusion of APL into adult and post-secondary vocational education programs.
- (4) to field test project research findings (especially model(s)) in exemplary programs and use appropriate assessments to determine the competency improvement in functional competencies identified by national APL studies.

Need and Problem

Vocational education has been primarily concerned with producing technically competent job applicants. Therefore, vocational educators have been at the forefront in establishing competency based approaches to instruction in the past several years. For example, several states

in association with the U.S. Air Force and the Navy have formed the Vocational-Technical Education Consortium of States (V-TECS) to create catalogs of performance objectives and criterion-reference objectives for several specific occupational areas.

Such competency-based approaches to vocational education is proving fruitful. However, competencies have tended to be viewed too narrowly, ignoring the need for vocational education to provide its students with total functional competence. There can be no separation of technical and functional life skills. The person who suffers financial collapse because of poor consumer practices or the person who ruins his health or runs afoul the law because of ignorance is apt to become a vocational failure despite his technical competence. Research and experience supports the belief that many vocational failures occur because of inabilities not related to technical incompetence. Failures often occur because of inadequate general life skills which supplement one's vocational skills. Whether for job entry, re-entry, advancement or mid-career change, persons need both vocational and general life-skill competencies.

The Adult Performance Level study conducted by the University of Texas has disclosed several performance-based objectives and tasks essential to a functional adult life in the areas of occupational knowledge, community resources, health, government and law, and consumer economics. These competencies are attained through the application of communications, computation, interpersonal relations and problem solving skills. This relationship can be illustrated on the following grid:

Occupational Knowledge Community Resources Health Government & Law Consumer Economics

Communications				
Computation				
Interpersonal Relations				
Problem Solving				

The major contribution of the study has been to give guidance in the development of a competency-based approach to developing a curriculum which would essentially produce a functionally competent adult.

As V-TECS guides helped delineate criterion objectives for vocational educators in specific occupational areas, adult competency guides developed from the APL studies helped define performance based objectives for vocational educators in essential knowledge areas of life to support the V-TECS competencies; V-TECS guides were created to help direct vocational education curriculum efforts to assure that vocational programs developed competencies essential for functioning in specific job areas. Further, adult competency guides were designed to help assure adult learners minimal competencies essential to coping with the requirements of functional adult living.

Because research based efforts have yielded measurable objectives in the related areas of technical competence and adult functional competence, and because curriculum guides have been developed and disseminated nationally, based on these measurable objectives in each of these areas of technical and functional competency, it is now feasible to determine and

to measure the degree to which vocational programs utilize an adult performance level approach. Furthermore, an evaluation of this approach on a national scale can then provide data essential to a) identifying the degree to which APL objectives are lacking in vocational programs and b) determining how components of existing APL objectives in vocational programs are most effectively infused with technically related objectives. This project was designed to effectively meet both these needs.

Statement of the Problem

While post-secondary and adult vocational education have developed at varying degrees of emphasis, the major concern has been primarily the occupational oriented knowledge and skills with little emphasis on complementary and supplementary competencies. The persons enrolled in post-secondary and adult vocational classes also need the opportunity to develop competencies that they need for functioning effectively in today's society if they are truly to be vocationally competent.

The Adult Performance Level Studies and the subsequent Instructional Activities based upon the APL studies have identified relevant curricula that can support and complement vocational instructional programs. The skills of communication, problem solving, computation, and interpersonal relations are needed for effective coping in present day society.

The needs for education relating to the APL studies are clear when the results of the studies indicate that we have many functionally incompetent persons in the U.S. In fact, one out of five adults lacks the skills and knowledge needed to function effectively in society and another 1/3 function at a marginal competency level. The implication of learning to overcome these incompetencies presents a problem worthy of intensive efforts.

Many adults are seeking social as well as economic security. One logical way for adults to obtain some competencies needed in coping with everyday problems is through the infusion of APL learning activities into the vocational curriculum.

While competency both on and off the job is needed by persons in everyday functions, a major problem of vocational educators is the inclusion of learning to meet life needs. Two major problem areas related to adult vocational education programs are apparent:

- (1) What have been successful approaches to infusion of the APL tasks into vocational programs for adults?
- (2) To what extent can APL tasks be successfully infused into vocational programs for adults?

II. RELATED LITERATURE

There exists one area of educational research which may attract the attention of not only the professional critics but all adults to the demand for a curriculum designed to equip learners with the functional competencies necessary for success in our society. The Adult Performance Level Study conducted by the University of Texas (Northcutt and the APL Committee, 1973) helped define a system of adult needs that can be demonstrated to be positively related to various measures of success in adult living, such as annual income, level of education, and occupational status. This body of research by implication has offered guidance for what should be taught in adult vocational education programs. The Adult Functional Competency Study (Northcutt and the APL Committee, 1973) attempted to answer the question, "How functionally competent are U.S. adults?". Their research findings attested that overall, approximately one-fifth of U.S. adults are "functionally incompetent" and approximately one-third of the adults "functioned with difficulty", while nearly one-half demonstrated that they were "proficiently competent". This estimate was based on a representative national sample of adults performing on indicators which covered five general knowledge areas--occupational knowledge, consumer economics, government and law, community resources, and health--and four skill areas--reading, problem solving, writing, and computation. All APL estimates of competency were based on broad sectors of human behavior and their limitations must be kept in mind. But for the first time there existed a body of research that attempted to delineate what competencies are directly related to American measures of success--levels of income, education, and occupational status.

The relevance of the APL competencies to adult and postsecondary vocational education was quite apparent. Former U.S. Commissioner of Education, Terrell H. Bell, in looking at Vocational Education in the Future, 1976 and Beyond, stated:

Emphasis will be on problem-solving skills as well as vocational competencies. Vocational education will continue to be responsible for increasing cognitive skills so that workers are able to go beyond entry level jobs. Emphasis will be placed on new curriculums and on such techniques as individualized learning. Today, however, 15-20 million American adults lack the simple basic skills to sustain themselves and their families or to avail themselves of the opportunities and assistance their communities offer. We must provide these basic skills along with those that a changing technology requires.

In addition to technological advances over the past decade, the demand for educational accountability has stimulated a trend toward competency based education. Marland (1973) points out that the tax-paying population is no longer willing to trust blindly in education. Lessinger (1973) explains the concept of accountability as a public policy containing three basic rights:

- (1) Every individual has a right to be taught what he needs to know to take a productive and rewarding part in society.
- (2) The taxpayer and his elected representatives have a right to know what educational results are produced by a given expenditure.
- (3) The schools have a right to draw on talent, expertise, and technology from all sections of society.

The interest in accountability and relevant curriculum content has extended into the 70's and has stimulated much effort and research into innovative ways of vocational education. Perhaps one of the most noteworthy innovations has been that of applying the scientific method for developing relevant curricula based on task analyses of what people are actually doing on the job (V-TECS) and coping skills for life (APL).

One of the most valid uses of the APL study was to use the research findings as a structure for a competency-based curriculum for adult vocational education programs. From 1973-1975, experienced adult educators participated in Auburn University Adult Education Summer Institutes and Follow-Up Workshops to develop instructional modules based on tasks identified by the APL study as necessary competencies for the average adult to succeed in life. Instructional modules developed and published were designed around five general knowledge areas: Occupational Knowledge, Consumer Economics, Health, Government and Law, and Community Resources.

Each instructional module incorporates within its specific content area three components: an instructional goal, performance objectives, and performance tasks. The first component of the instructional modules is the instructional goal, a broad description of the capability which the functionally competent adult should possess for that particular knowledge area. A second component of the instructional modules is the performance objectives, which help to operationally define the instructional goal; some degree of mastery of these objectives is required for true functional competency. The performance tasks are the third component of the instructional modules and are a series of situation-specific requirements necessary for satisfactory performance accomplishment.

Another structural dimension of each instructional module is that the nucleus of each module (the content area of knowledge) places at the instructor's disposal an outline of instructor and learner activities and suggested resources needed to implement these activities. This structural format of each instructional module coincides directly with the current version of the APL description of competency objectives (Northcutt and the APL Committee, 1975).

In summary, the Adult Performance Level concept may be a major educational breakthrough for determining what competencies adults need to attain for a successful life. For vocational education, a new foundation for performance based learning can now be constructed. Some approaches to this foundation have already begun, the most notable being V-TECS. The Adult Competency Instructional Guides is an effort to establish a new aspect of curricula for educational programs. This approach provides a blueprint for developing competencies in real life needs that may relate to vocational competencies in varying degrees. A consolidation of these and other efforts should provide a sound basis for models that when field tested and revised could be exemplary projects that would guide future post-secondary and adult vocational programs. This effort would be expected to help vocational education meet the mandate for completing the challenging task of furnishing a comprehensive competency-based curriculum for vocational education.

III. RESEARCH METHODOLOGY

Project Goal

The goal of the proposed project was to bring about further the infusion of adult and post-secondary vocational education with an adult performance level competency approach. More specifically, the project proposed several goals:

1. The identification, description and evaluation of the present "state-of-the-art" in the nation.
2. The development of an APL Curriculum Catalog which describes APL curriculum materials which are available and currently in use in vocational programs.
3. The formulation of a model(s) for infusing adult and post-secondary vocational education with an APL competency approach.
4. The field testing of the model(s) within a minimum of 12 sites, to demonstrate its effectiveness and transportability.

Goal 1: State-of-the-Art

The initial step of the project was the identification of those existing adult and post-secondary vocational programs throughout the nation which use an APL competency approach. To identify relevant programs, a literature search and an extensive effort to contact the adult and post-secondary education institutions were planned. From the search and referrals made from the field a master list of programs meeting the criteria was developed. Following is an outline of this procedure.

1. Identified post-secondary vocational education programs within the nation reported to be using an APL approach.
 - 1.1 Conducted a literature search including the various relevant clearinghouse holdings and dissertation abstracts.

- 1.2 Compiled a list of the vocational programs which have purchased the Auburn University produced APL Curriculum Guides.
- 1.3 Contacted the 78 persons who have participated in National APL Institutes at Auburn University for a listing of vocational programs utilizing the APL approach.
- 1.4 Contacted the post-secondary vocational officer of each state for a listing of relevant programs.
- 1.5 Contacted the adult education program officer of each state for a listing of relevant programs.
- 1.6 Contacted the Federal and Regional vocational and adult education officers for a listing of relevant programs.
- 1.7 Contacted the vocational education and adult education professional societies for a listing of relevant programs.
- 1.8 Contacted university professors of vocational and adult education for a listing of relevant programs.
- 1.9 Contacted the University of Texas APL Project for a listing of relevant programs.
- 1.10 Compiled a master list of possible vocational programs reported to be using an APL approach.

With the completion of the master list (1.10) the project entered a descriptive phase (2)* A questionnaire was developed and field tested (see Appendix B). It was administered to the identified programs in order to determine if and to what extent APL objectives were indeed used in the program. To verify the results of the questionnaire, visits were made to the following selected programs: (a) Adult Learning Center Abilene, Texas, (b) APL/VED Project, Memphis, Tennessee, (c) State Department

* All numeral references in this section refer to Appendix A.

of Education, Tallahassee, Florida. (c) Adult Learning Center,
Tampa, Florida.

As the data from the questionnaire were received, they were analyzed and codified to determine the programmatic patterns and generalizations which were described. This interpretive process was verified by a procedure in which different reviewers came to separate agreement concerning these patterns and generalizations. The descriptive phase of the project closed with the preparation of a monograph describing the "state-of-the-art". This monograph is included in Chapter 4, Results and End Products.

Goal 2: The Development of an APL Curriculum Catalog Utilizing APL Materials Which Are Available and Used in Vocational Programs

There are currently several organizations developing different kinds of APL materials. This project drew on these existing organizational materials rather than create more materials. This project collected from around the nation APL materials which are presently available or being developed. After completing this process a catalog of APL materials useful for vocational education was prepared. A copy of this catalog can be found in Chapter 4.

Goal 3: Formulation of a Model for Infusion Adult and Post-Secondary Vocational Education With APL Objectives

With the establishment of verified and reliable interpretative data based on existing programs, building a model for infusing adult and post-secondary vocational education with APL objectives began (3). The staff researchers formulated a model which included procedures for administrative implementation, assessing learner competencies, identifying learner needs, recommending learner activities, assessing learner achievement and for promoting continued learning even after the course was completed. A

description of the model is in Chapter 4. The model developed by the staff was refined by bringing together an advisory board of experienced vocational and adult educators. The advisory committee met six times during the course of the project for input into the project. Members of the committee were (a) Dr. Brent Halverson, Assistant Professor of Adult and Community Education, (b) Dr. Maynard Iverson, Research and Development Coordinator, and (c) Dr. Russell Wilson, Editor of Adult Literacy and Basic Education.

Goal 4: To field test the model in 12 sites in order to demonstrate its effectiveness and transportability

With the establishment of a model and the securing of APL materials relevant to vocational education, the model was piloted in twelve Alabama vocational programs. The programs selected for the pilot study had administrative support for the project and a procedure for assessing learner competencies, needs, and progress. Those instructors who were selected receive training and continued assistance from the staff during the pilot phase of the project. The instructors and their programs are:

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As the model was implemented (5.4), all students were pre-tested for purposes of establishing a baseline on APL competencies as well as providing diagnostic data on each student's needs. The instructors were assisted by the project staff as needed. Upon completion of the course, a post test was used to ascertain learner progress on APL competencies. The Adult APL Survey established by the American College Testing Program utilizing the University of Texas Adult Performance Level Studies was used for both the pre and post testing. This Survey measures the competencies in the four basic skills: communication, computation, interpersonal relations, problem solving, and in the five knowledge areas: community resources, consumer economics, government and law, health and occupational knowledge.

The total project received continual feedback from participants, Alabama State Department of Education personnel, and others related to the project. This evaluative information was used to constantly guide the decision making. Evaluative checks, on data collection and interpretation, were built into the plan (2.1, 2.4, 3.7, and 5.4.3).

Mr. William Clayton, Assistant Director of Adult Education for Pensacola Junior College, the third party evaluator, assessed the project's compliance with objectives and plans. A summative evaluation report was provided by the evaluator and is included in Appendix C.

IV. RESULTS AND END PRODUCTS

The experience and results derived from this project and the end products produced can serve as a foundation for further development of Alabama's adult post-secondary vocational education program. The end products were designed to facilitate transportability of the results of this project to other state and national programs. Several results and end products were accomplished:

1. The identification and description of those adult post-secondary programs within the nation which were using an APL competency approach. An evaluative description of these programs or the "state-of-the-art" entitled: Adult Performance Level Instruction in Vocational Education Programs for Adults: A Survey; is included in this report which was disseminated to USOE, each state department of vocational education and through the various microfilm clearinghouses.
2. An instructional model entitled: A Model for the Infusion of Adult Performance Level Instruction With Adult and Post-Secondary Vocational Education for infusing adult post-secondary vocational education with APL competency concepts. The model which is included in the final report was:
 - a. shaped and refined by experienced vocational and APL educators.
 - b. field-tested and evaluated in 12 Alabama programs for validity and transportability.
 - c. disseminated through the proper vocational and adult education microfilm clearinghouse and to all state departments of vocational education and to U.S.O.E. (see plan item 5.5).

3. The identification, description, and evaluation of currently produced APL curricular materials in the nation. Those evaluated as valuable to adult post-secondary vocational education were cataloged (see plan item 4.6). The end result, the APL Curriculum Catalog, is included in this report which was disseminated to U.S.O.E., to each state department of vocational education, and through the proper vocational and adult education microfilm clearinghouses.

1. STATE-OF-THE-ART

Adult Performance Level Instruction
In Vocational Education Programs
For Adults: A Survey

ADULT PERFORMANCE LEVEL INSTRUCTION IN
VOCATIONAL EDUCATION PROGRAMS FOR ADULTS: A SURVEY

The purpose of this report is to share information about the extent to which vocational education programs for adults are including an adult performance level (APL) component as an integral part of the program. An attempt will also be made to describe and evaluate these programs.

The format of the report follows:

1. A brief look at the concept of APL
2. Some implications of APL for Vocational Education
3. How the survey was conducted
4. Summary of the findings
5. Description of APL/VE programs
6. Evaluation of APL/VE programs

The Adult Performance Level Studies: A Brief Description

In today's world, "life-long learning" is necessary, and educational skills necessary for achievement of competency in coping with life skills must be developed to an acceptable degree through the public school system either in the regular elementary, secondary and post-secondary schools or through adult credit, non-credit, or general educational development programs. It was only a short time ago that headlines across the United States were informing us that "one out of five adults lacks the skills and knowledge needed to function effectively in our society." Although persons with more formal education were more competent than those with less education, legislative leaders, college professors and persons with a great deal of formal and informal education have some educational needs. These are major findings of the Adult Performance Level (APL) Project

conducted at the University of Texas at Austin. A central objective of the APL project has been to specify competencies which are functional to economic and educational success in today's society. It was discovered that adults have need to develop competencies in five "general knowledge areas." The areas are:

1. Consumer Economics
2. Occupational Knowledge
3. Community Resources
4. Health
5. Government and Law

In addition to the general knowledge areas, four primary skills that seem to account for most adult competency requirements were identified.

These skills are:

1. Communications skills (reading, writing, speaking, listening)
2. Computation skills
3. Problem solving skills
4. Interpersonal relations skills

THE APL MODEL OF FUNCTIONAL COMPETENCY

	Consumer Economics	Occupational Knowledge	Health	Community Resources	Government and Law
Reading					
Writing					
Speaking, Listening					
Computation					
Problem Solving					
Inter- personal Relations					

Some Implications of APL for Vocational Education

The APL findings have had obvious implications for programs in adult basic education and APL objectives have rapidly become an integral part of numerous adult basic education programs. Elementary and secondary educators have become conscious of the implications of the APL findings, and increasingly use APL objectives in their curricula. Some states have made a certain level of mastery of APL objectives a requirement for high school graduation.

Vocational educators have also actively sought to include APL objectives in their curricula and programs. The assumption behind this idea is that adult and post-secondary vocational education programs should include opportunities for learners to develop total functional competence. The concern with producing technically competent job applicants, though fruitful, has been considered by some to be inadequate. Research and experience support the idea that many vocational failures occur because of inability not related to technical competence. Failures often occur because of inadequate general life skills which supplement one's technical skills. A further assumption has been that adults who are in need of job skills are also in need of APL skills. This second assumption was implied in the APL study findings. Functionally incompetent adults tended to be among those who were unemployed, or had low level jobs.

How The Survey Was Conducted

In an effort to begin identifying adult vocational education programs using APL, the following steps were taken:

1. A literature search was conducted of the various relevant clearinghouse holdings and dissertation abstracts.
2. A list was compiled of the vocational programs which purchased the Auburn University APL Curriculum Guides.

3. The 78 persons who participated in National APL Institutes at Auburn University were contacted for a listing of vocational programs utilizing the APL approach.
4. The post-secondary vocational officer of each state was contacted for a listing of relevant programs.
5. The adult education program officer of each state was contacted for a listing of relevant programs.
6. The Federal and Regional vocational and adult education officers were contacted for a listing of relevant programs.
7. The vocational education and adult education professional societies were contacted for a listing of relevant programs.
8. University professors of vocational and adult education were contacted for a listing of relevant programs.
9. The University of Texas APL Project was contacted for a listing of relevant programs.

Preliminary Questionnaire

The above mentioned contacts were requested to furnish us with names and addresses of individuals who were thought to have knowledge about programs in adult vocational education that would include an APL component. As a result of the contacts a mailing list was composed of the individuals considered "probably most aware" of such programs. A preliminary questionnaire was sent to the 400 persons on the mailing list. Ninety-four of these were returned and fifty-two were considered "positive" in the sense that examination of the response indicated that APL skills were being included as part of the curriculum in adult vocational education programs.

Final Questionnaire

In an effort to discover some specifics about the circumstances surrounding these "positive" programs a more detailed questionnaire was mailed to the fifty-two educators involved. Twenty-three of these were returned, furnishing information on the teacher, institution, setting,

decision to use APL, reactions of personnel, assessments of need and achievements, content, and process.

Program Settings

The teachers ranged from 4 to 35 years teaching experience. Only 3 did not hold teaching certificates. They represented a variety of institutions, community colleges having the highest representation, i.e. 8. Population of the areas served ranged from 1,000 to 400,000. Nine respondents described their areas as rural or suburban. Two described their areas as inner city.

Most respondents first heard of APL through their state departments of education. They reported that the decision to use APL was based on learners' needs and national findings that were recently published. The decision to use APL skills as content was primarily the decision of the administrators. That local needs were taken into consideration is implied in the instructors' reactions to the administration's decision to use APL. The reactions were stated as "favorable" in 11 of the 23 cases "because the instructors recognized the need in the learners." Only two respondents indicated that instructors were "unfavorable" in their response to teaching APL. The reason for an unfavorable response was "extra work."

Program Content

Occupational Knowledge and Consumer Economics were taught slightly more often than the other knowledge areas of Community Resources, Government and Law, and Health. The basic skill of Interpersonal Relations received very little emphasis, i.e., taught very few times. There was a fairly even spread of emphasis over the other four basic skills of reading, writing, computation, and problem solving.

Program Arrangements

Eleven respondents stated that APL skills were integrated or infused rather than taught at separate times. The intent of the questionnaire in this case was to determine how frequently APL content was integrated with the vocational content. Some confusion resulted because most vocational programs included a separate ABE (or learning skills) component which had integrated APL content. Thus, APL was integrated, but not with vocational content.

As a result of this search, it was established that APL skills were being taught in one way or another to adult vocational students in community colleges, technical schools, vocational centers, and correctional institutions in several states.

Summary of Findings

The responses to some of the questionnaire items are presented below. Not all respondents answered all the items on the questionnaire. (A composite of responses is attached).

How many years of teaching experience have you had?

4 years - 2
5 years - 1
6 years - 1
7 years - 1
8 years - 2
9 years - 2
10 years - 2
12 years - 2
14 years - 1
15 years - 1
18 years - 2
25 years - 1
27 years - 1
35 years - 1

How many years of experience have you had teaching adult vocational education?

1 year - 3
2 years - 1
3 years - 1
4 years - 1
5 years - 1
7 years - 3
8 years - 2
9 years - 1
10 years - 1
12 years - 1
20 years - 1

Do you presently hold a teaching certificate?

yes - 15
no - 4

Is your present position part-time or full-time?

part-time - 4
full-time - 15

How long have you included APL skills as part of the curriculum?

1 month - 1
3 months - 3
6 months - 1
1 year - 5
1½ years - 2
2 years - 2
3 years - 1
4 years - 2
6 years - 1
12 years - 1

What is your service area in Vocational Education?

Adult Basic Education (ABE) - 6
Business and Office Education (BOE) - 3
Home Economics - 2
Agriculture - 1
Trades and Industrial Education - 1
Family and Child Development - 1
Adult Education - 1

In what type of institution are you working?

Community College - 8
Technical School - 2
Area Vocational Center - 2
Correctional Institution - 2
Other
State Department of Education - 1
Public School - 2
Adult Education Learning Center - 2
University - 1
Central Board of Education Office - 1

What is the population of the area served by your school (nearest 1,000)?

1,000 - 1	75,000 - 1
3,000 - 1	80,000 - 1
4,000 - 1	84,000 - 1
5,000 - 1	100,000 - 2
10,000 - 1	200,000 - 1
27,000 - 1	300,000 - 1
34,000 - 1	310,000 - 1
47,000 - 1	400,000 - 1
50,000 - 1	600,000 - 1
65,000 - 1	

What is the setting of the area served by your school?

rural - 9
suburban - 4
urban - 7
innter city - 2
other - rural city, small city, all - 1 each

Your first contact with the APL Studies was through:

local school administrators - 1
state department of education - 12
workshop - 13
national meetings - 3

The decision to use APL skills as content in adult vocational class was primarily the decision of:

school or program administrators - 11
instructor - 6
other (State ABE) - 5

The decision to use APL is primarily based on:

learners' requests - 2
learners' needs - 12
national findings recently published - 7
other - 4 (teacher-recognized deficiencies, etc.)

If this decision was made by administrators, what were the instructors' responses?

favorable - 11
unfavorable - 1

If this decision was made by instructors, what were the administrators' responses?

favorable - 7
unfavorable - 0

In cases where APL related learning may not have been readily accepted by learners, instructors, or administrators, what means were successfully used to gain eventual acceptance?

materials
unbelievers shown how present courses were ineffective

In this class learners' needs and competencies are assessed or estimated by:

- instructor-made tests - 10
- commercially produced tests - 9
- standardized tests - 9
- observation by instructor of learners' reaction to learning situations - 12
- reports from employers of former learners - 2
- reports from former learners - 4
- reports from administrators - 3
- other - 2 (instructor and advisory committee; criteria-referenced tests)

Learners' achievements are assessed by:

- instructor-made tests - 13
- commercially produced tests provided with instructional materials - 10
- standardized tests - 8
- instructor observation and records of progress - 13
- other - 3 (student requests; criteria-referenced tests)

What are some means that you use to promote a continuing interest in self-improvement through further education by formal and informal means (lifelong learning)?

- emphasis on community resources
- student orientation to campus
- rap sessions
- goal setting, career planning
- credit for non-traditional and prior learning
- self-paced courses
- news media promotion

Below is a grid listing basic skills for each general knowledge area of the Adult Performance Level Studies. Please circle A (always), S (sometimes), or N (never), based on how much you include these skills in each area as objectives in your curriculum.

Community Resources

Reading - Always	- 8
Sometimes	- 7
Never	- 0
Writing - Always	- 2
Sometimes	- 10
Never	- 1
Computation - Always	- 2
Sometimes	- 10
Never	- 1

Community Resources, continued

Problem solving - Always - 4
Sometimes - 8
Never - 1

Interpersonal relationships - Always - 4
Sometimes - 8
Never - 2

Occupational Knowledge

Reading - Always - 8
Sometimes - 7
Never - 0

Writing - Always - 4
Sometimes - 9
Never - 1

Computation - Always - 4
Sometimes - 9
Never - 0

Problem solving - Always - 6
Sometimes - 6
Never - 1

Interpersonal relationships - Always - 4
Sometimes - 8
Never - 2

Consumer Economics

Reading - Always - 9
Sometimes - 6
Never - 0

Writing - Always - 8
Sometimes - 4
Never - 2

Computation - Always - 9
Sometimes - 5
Never - 0

Problem solving - Always - 8
Sometimes - 4
Never - 1

Interpersonal relationships - Always - 5
Sometimes - 7
Never - 2

Health

Reading - Always - 7
 Sometimes - 7
 Never - 1

Writing - Always - 3
 Sometimes - 9
 Never - 1

Computation - Always - 2
 Sometimes - 10
 Never - 1

Problem solving - Always - 3
 Sometimes - 9
 Never - 2

Interpersonal relationships - Always - 3
 Sometimes - 8
 Never - 3

Government and Law

Reading - Always - 6
 Sometimes - 9
 Never - 0

Writing - Always - 4
 Sometimes - 9
 Never - 1

Computation - Always - 4
 Sometimes - 7
 Never - 2

Problem solving - Always - 3
 Sometimes - 9
 Never - 1

Interpersonal relationships - Always - 2
 Sometimes - 10
 Never - 2

In using basic living skills in your curriculum, do you teach them at separate times or do you integrate them with the vocational skills?

integrate - 11
separate - 3

Description of APL/VE Programs

The next step was to establish how to include APL objectives in an already crowded Vocational Education (VE) curriculum.

Telephone and in-person interviews were conducted with individuals who were thought to be actively engaged in programs that contained an APL component. Some of these programs were still in the planning stage. The interviews revealed that APL skills were taught separately from the vocational skills. In most cases APL skills were taught by those responsible for the academic related skills, learning skills, or ABE, portion of the total program. A meaningful consensus of actual time allocated for APL instruction was difficult to determine. In some cases APL concepts in one or more knowledge areas were taught just one period each week throughout the vocational program, thus separating APL from both academic and vocational subject matter. In other cases the entire academic portion of the program was "infused" or "integrated" with APL content. Another approach (the University of Texas project) involved infusing APL skills with ABE as a pre- or post-vocational course.

Some sources mentioned that the teachers of vocational subjects were encouraged to reinforce APL skills in their technical skills classes when it seemed appropriate. Although there were a few reports of the resistance of vocational teachers to reinforcing APL skills themselves, the resistance was reduced when teachers became aware of the value of APL skills to the learners.

The number of cases (or projects) where APL skills were taught to adult vocational education students seems to be relatively small at the present time. Twenty-three were identified through our study. However, enthusiasm is high and eight more locations reported having plans for

developing programs in the near future. At least two of these (Washington, D.C., and North Dakota) were in the later stages of planning, having already developed materials, and were planning to launch programs in the fall of 1978. Each case or project included several sites so the number of adults receiving APL instruction through vocational programs was actually larger than might appear at first glance.

Evaluation of APL/VE Programs

The overall objective implied in all the programs is to raise the Adult Performance Level of people enrolled in adult vocational programs so that they will be able to function more competently in vocational and other life roles. A test of the value of combining APL instruction with vocational instruction should answer several questions, for the most part centering around content and approach.

Content. A major assumption is that vocational adult education programs should include APL concerns, so that people will be successful on jobs for reasons other than just technical competence. How many people leave their jobs because they lack APL skills? Precisely what are the related APL competencies that learners lack? Do people who maintain their jobs possess these skills? Are some APL skills more job-related than others? The assumption that people who are without a technical skill also need APL skills should also be investigated.

Approach. The following three patterns have emerged in this survey:

1. APL instruction isolated as a separate course (before, during, or after the VE program).
2. APL infused with the established academic component.
3. APL infused with the vocational and technical content.

These patterns should be compared on variables such as learner achievement of APL and technical content, learner attitude toward the learning approach, instructor attitude toward need, and effectiveness of programs.

2. INSTRUCTIONAL MODEL

A Model For The Infusion
of Adult Performance Level
Instruction with Adult and
Post-Secondary Vocational
Education

A MODEL FOR THE INFUSION OF
ADULT PERFORMANCE LEVEL INSTRUCTION WITH
ADULT AND POST-SECONDARY VOCATIONAL EDUCATION

INTRODUCTION TO THE MODEL

Vocational educators have been primarily concerned with producing technically competent individuals. Some vocational educators consider this an unnecessarily narrow view and assert that there can be no separation of technical and functional life skills. Research supports the idea that many vocational failures occur because of incompetence that has nothing to do with technical skills. This instructional model is based on the assumption that persons need both technical and general life skill competencies.

The Adult Performance Level Study conducted by the University of Texas has disclosed several performance-based objectives and tasks essential to a functional adult life in the areas of occupational knowledge, community resources, health, government and law, and consumer economics. These competencies are attained through the application of communications, computation, interpersonal relations, and problem solving skills. The major contribution of the study has been to give guidance in the development of a competency-based approach to developing a curriculum which would essentially produce a functionally competent adult.

The following pages describe a model for instruction developed at Auburn University. This model could be described as a pattern for developing a model, because it consists of an outline or structure applicable to any

vocational teaching area. Twelve instructors in seven vocational areas tested this pattern or model and developed instructional plans for use in their vocational classes for adults. Six of these instructors had indepth training in the use of V-TECS catalogs and related competency based materials. Examples of their applications are included in the model description.

The model is not a ready-made, self-contained bag of tricks. Its application takes time, effort, and imagination. Following is a list of the twelve vocational instructors who participated in field testing this model.

AUTO BODY

James E. Cheeseboro
Carver State Technical Trade School
P.O. Box 7175
Mobile, AL 36607

L.C. Rhone
MacArthur State Technical College
P.O. Box 600
Opp, AL 36467

BUSINESS AND OFFICE EDUCATION

Cathy Clement
Muscle Shoals Area Vocational Center
P.O. Box 2186
Muscle Shoals, AL 35660

Hulon Nunn
Wallace State Technical Community College
P.O. Box 250
Hanceville, AL 35077

CLOTHING CONSTRUCTION

Frances LeSueur
Randolph-Roanoke Area Vocational Center
P.O. Box 127
Wedowee, AL 36278

CARPENTRY

Charles Thigpen
Muscle Shoals Area Vocational Center
P.O. Box 2186
Muscle Shoals, AL 35660

HORTICULTURE

David Glover
Muscle Shoals Area Vocational Center
P.O. Box 2186
Muscle Shoals, AL 35660

Troy D. Newton
Huntsville Area Vocational Center
2800 Drake Avenue, SW
Huntsville, AL 35805

RADIO-TV REPAIR

Johnny H. Spears
Tallapoosa-Alexander City Area Training Center
P.O. Box 838
Alexander City, AL 35010

WELDING

Paul D. Vaughn
Albert P. Brewer High School and Vocational School
Route 2, Box 149
Somerville, AL 35670

Samuel Vinson
Huntsville Area Vocational Center
2800 Drake Avenue, SW
Huntsville, AL 35805

Jimmy Young
Randolph-Roanoke Area Vocational Center
P.O. Box 127
Wedowee, AL 36278

RATIONALE FOR THE MODEL

The instructional model developed at Auburn University is unique in comparison with others across the country. When deciding on the approach to teaching APL skills to adults in vocational education classes, the project personnel first considered the following options.

1. A pre-vocational component in APL content
2. A post-vocational component in APL content
3. Using time weekly for a separate APL class

The idea of a pre-vocational course was rejected because it was feared that the volunteer learners who had paid for a vocational class would have difficulty accepting just APL content. The post-vocational idea was considered somewhat more favorable because the instructors could possibly have time to build rapport, to create positive attitudes toward learning, and to expose learners to their individual needs for APL skills. However, this idea also was rejected because it was assumed that once the learners completed their content in the technical area they would be anxious to discontinue class. The third option, of separate weekly APL instructional periods, was never entirely rejected. The model accommodates the possibility of using this approach where the instructor views it as applicable.

In the eventually developed model APL skills are taught along with technical knowledge and skills. In some cases there may be little difference between the technical knowledge and skill and the APL skill, e.g., taking accurate measurements. In such cases little time need be devoted exclusively to the APL skill. In other cases the APL skill may at first appear unrelated but the instructor presents it as a job skill. For example, the APL skill of addressing envelopes is presented in the context of

ordering parts or sending in reports. This approach seemed most suitable because it offered flexibility and lacked some of the disadvantages of the other approaches.

COMPONENTS OF THE MODEL

Briefly stated, the components or distinctive features of the model are as follows:

- * Local Administrators' Support
- * Instructor orientation program
- * Pretest/Post-test
- * Priority ranking of objectives
- * Identifying and securing resources
- * Selection of methods and techniques
- * Continued assistance from project personnel
- * Evaluation
 - 1. Assessment of the Model
 - 2. Informal Instructor Evaluation

* Local Administrators' Support

Adult Vocational education classes in Alabama are held in many different types of schools, recreation areas, industry etc. This project selected instructors who held their classes in two different types of school settings which necessitated gaining the support of two different groups of administrators. Four of the instructors held their class in post-secondary institutions which means that support for the project and permission for instructor participation had to be gained from the President of the institution.

The other eight instructors in the project held their classes in secondary institutions, either Area Vocational Centers or a combination

high school and vocational school. Approval for instructors to participate from these schools was gained from the superintendent of the district in which the school was located as well as the principal of the school.

After administrative support was assured, instructors selected, a Memorandum of Agreement (see Appendix E) was signed between the instructor and the Project Director. This agreement outlined the responsibilities of each party and helped to clarify the aims and goals of the project to the instructors.

* Instructor orientation program

The instructor orientation program at Auburn took the form of a weekend workshop (see Appendix E). The overall objective of the workshop was that the instructors would be able to infuse APL objectives and learning activities with vocational objectives and learning activities. Examples of handouts are in Appendix E.

Broad Objective: The workshop participants will be able to effectively infuse their present vocational curriculum with APL objectives and learning activities.

- Specific Objectives:
1. The participants will be informed about APL study findings.
 2. The participants will be introduced to APL materials.
 3. The participants will become familiar with the concept "infusion" as used in the instructional model.

The following activities were designed to meet the listed objectives.

The participants:

1. listen to a transparency presentation about APL.
2. view slides describing APL study findings and recent programs utilizing APL concepts.

3. take the Adult APL survey.
4. examine APL materials and listen to a presentation (see Appendix E).
5. participate in a guided discussion on the concept of "infusion."
6. view a demonstration lesson where APL is "infused."
7. work in groups using instructional planning sheets to develop sample lesson plans (see Appendix E).

* Pretest/Post-test

The pretest is considered a necessary diagnostic tool. There is no need to use valuable class time (or preparation time) meeting objectives that have already been met. The pretest helps the instructor to set priorities for both the class as a whole and/or for individuals. All adults who registered for the vocational classes taught by instructors in this project were pretested. At the conclusion of the vocational classes, all adults still enrolled were post-tested.

The Adult APL Survey published by the American College Testing Program was used for both pre and post-testing.

* Priority ranking of objectives

The ranking of objectives is based on (a) the needs as diagnosed on the pretest, and (b) the nature of the vocational skill being taught. For example, the pretest results may indicate that learners lack map reading skills. The radio-television instructor in the Auburn project thought spending time on map reading skills was worthwhile because TV repairmen do pick-up and delivery. Map reading in this case fit into the nature of the vocational skill. He gave it a high priority. Other instructors did not give map reading a high priority. A Needs Assessment Form was

developed to enable the instructor to plan an individual competency-based program for each adult learner, based on the ranking of objectives. A copy of the needs assessment form appears in Appendix E. The instructor fills out one form for each learner by circling the item missed on the pretest (Item Analysis column on the form), and the indicating if the circled item applies or relates to the vocational subject. Both columns need to be considered as priorities are set. Ideally, priorities are set on an individual basis, but there may be exceptions. Three instructors in the Auburn project spent group time on computing percentages (Item 22) because a large majority of their learners missed that item. The "designator" column is keyed to the Adult Competency Instructional Guides. This column is by no means complete but gives the instructor a place to start in finding activities that help the learner to overcome a specific need.

- * Identifying and securing resources and
- * Selection of methods and techniques

These two components of the model are necessarily tied together. Instructors complete an instructional planning sheet (Appendix E) according to directions. Sources of materials and ideas for activities are suggested in Auburn University's Adult Competency Instructional Guide and other similar guides. The Alabama instructors used their adult learners as sources when possible.

V-TECS, a series of catalogs of objectives and performance guides for various vocational teaching areas, was used by several of the instructors in the project in Alabama. The detail with which learner performance is described in V-TECS catalogs served as an asset to infusing APL. The use of these catalogs and other competency based curriculum materials

assisted the instructors by presenting suggested analysis of steps in each task which the learner was expected to perform.

* Continued assistance from project personnel

In the project conducted through Auburn University, project personnel assistance was necessary because unique situations call for individual aid and guidance. Auburn personnel worked on-site and by phone with the individual instructors and also conducted a second workshop in which the instructors could share problems as well as progress. Agenda for the Final Workshop is in Appendix E.

* Evaluation

The project was evaluated using the following two methods: (1) Assessment of the Model, using a pretest--post-test comparison and (2) Informal Instructor Evaluation.

1. Assessment of the Model

The 12 project instructors pretested and post-tested the 179 adults in their adult vocational classes using the APL Adult Survey by American College of Testing. Only the scores of 134 learners who had both pre and post-test scores were used.

In this study, the correlated t-test (Edwards, 1969) was used to determine the difference between the pre-test and post-test scores. According to Fox (1969) when change or difference is being tested in two sets of data from the same people and the data in the second set of observations is related to the first, a t-test for correlated means is generally used.

Indicated in Table 1 is the number of adult learners, their total pre-test mean, post-test, t-value, degrees of freedom and level of significance.

Table 1

NUMBER OF ADULT LEARNERS, TOTAL PRE-TEST MEAN,
TOTAL POST-TEST MEAN, T-VALUE,
DEGREES OF FREEDOM AND
SIGNIFICANCE LEVEL

Number	Mean		t-value	df	sig.
	Total Pre-test	Total Post-test			
134	33.27	36.17	8.21	133	p .05

Using the t-test of correlated means, a significant difference at this .05 level of significance was found.

2. Informal Instructor Evaluation

The instructors presented at the Final Project Workshop on informal evaluations of class learner response and classroom participation. This evaluation was video-taped for future reference; however, several instructor comments, taken directly from the Video tape, are as follows:

Business and Office: "This is the most enthusiastic group I have had. I like to feel that it is because of the APL approach, but at this point we can't really say. If the attitude continues until the end I think I can say it is because of APL.

"The initial reaction to the word TEST was the only kind of problem I have encountered, and that was solved quickly. They have all been really cooperative and willing to learn."

Business and Office: "My students are very enthusiastic about the accounting portion. They really want to learn this, and they feel like it will help them in their work."

Welding: "The results from the APL test did affect my lesson plans indirectly. Results of this test gave me a better understanding of the students' needs, which was the diagnostic purpose of the test, and it will help me place more emphasis where needed."

Radio/T.V.: "They wanted some use for the English that they had been sitting through for seven years."

"Instead of just knowing what a verb and adjective are, they want to see how they are used in everyday life, because once they've completed that course in school, they fold their papers and forget about it. But if they see where it's needed in everyday life they'll pull those notes back out and use them."

"My administrator is also in favor of competency-based education."

"Then there's learning here in interpersonal relations. This kind of contact is much more important in this type of work than in some other kinds of work."

Auto Body: "One area that particularly fascinates them is computing percentages; they love it. This is directly related to their jobs; estimating labor on jobs, cutting quarter panels for cars, etc. They also enjoyed the area of labels. They never realized the little label on that can meant so much - how much to cut the paint - it's on the can. They didn't realize this before."

Welding: "I have invited some resource people from welding supply companies to discuss testing and ordering supplies, etc."

Horticulture: "I infused the things that I felt like from the test needed to be stressed. I infused APL into the regular program. If they didn't miss items much on the test I didn't stress them in class. I found out they have a very positive attitude toward this APL. Our

adult education supervisor is very much in favor of the APL approach. After seeing my lesson plans he made the comment that he wished all the instructors there would take this approach to teaching."

Carpentry: "After I gave the APL test, I told them to compute the board feet of lumber that will be in their project, then get prices from three people and compare them. We use catalogs to find out exactly what they need. I told them to prepare a letter, etc. We accomplish a lot by interaction, helping each other."

Auto Body: "I find that if the instructor can teach as much as possible of that related material himself it has more meaning for his students, because we can relate it directly to the skill area. My administrators are very enthusiastic about the program. My director thinks it should be incorporated into the entire program."

Auto Body: "The APL test had approximately the same effect as the pre-test in the PAVE project, except we were not measuring skills as in the PAVE project. You know a student can adapt to a certain situation because you have proven its need with the test."

EFFECTIVENESS OF THE MODEL

The project participants pretested and post-tested the learners in their adult vocational classes. The results indicated that the learners did make substantial gains in their Adult APL Survey scores.

The instructors' informal evaluation of the effectiveness of the model were also positive. All of them reported that they planned to continue infusing APL with their vocational curriculum plans for adult classes next year. Some of these, those who are high school and post-high vocational-Technical teachers, have infused APL with the technical instruction in

their daytime classes. These decisions to extend the concept of "infusion" to other classes are based on the learners' response to the relevance of APL skills. The instructors reported high interest in APL and seemed to think that it contributed to the learners' motivation.

For instructors in this Project, the model appears to have been effective.

3. APL CURRICULUM

CATALOG

CRITERIA FOR INCLUSION OF
ITEMS IN THIS CATALOG

Items included in this catalog were chosen because (1) they are effective and thorough in presentation of APL curriculum and instructional techniques, and (2) they are reported to have been used in vocational programs, and (3) they are available on order. Some items were rejected for inclusion on the basis of availability, some on the basis of inadequacy.

ADULT COMPETENCY INSTRUCTIONAL GUIDE

Based on Adult Performance Level Studies. A cooperative effort of Auburn University's Vocational and Adult Education Department, Dr. Harry E. Frank, Project Director, and the Alabama State Department of Education, Adult Basic Education Division, Norman O. Parker, Coordinator, 1976.

Description. A very detailed instructional guide for teaching adults needed skills. In two large volumes, one of which treats Occupational Knowledge, Community Resources, and Government and Law; the other Consumer Economics and Health. Attempts completeness in its wide variety of objectives and tasks for adults in each knowledge area. For each task, the instructor's activity, the learner's activity, and the resources needed are specified.

To order: Send \$6.00 a volume to Dr. Harry E. Frank, 203 Petrie Hall, Auburn University, Auburn, Alabama 36830.

LEARNING INFORMATION FOR EFFECTIVE LEARNING

Adult Coping Skills Reading Modules. Based on Adult Performance Level Studies. By Jo Smith, Auburn University, and Bobbie L. Walden, Alabama State Department of Education. Published 1976.

Description. In two volumes: "No. 17" deals with Health, Occupational Knowledge, and Government and Law, "No. 18" with Consumer Economics and Community Resources. A very practical guide for instructing the learner in the fundamental vocabulary (i.e., the basic words, phrases, etc.) of each knowledge area. It includes techniques such as the use of vocabulary cards, games, and questionnaires— designed to instill coping skills for daily life. Some of these skills include first aid measures, safety precautions, nutrition planning, reading want ads, writing job applications, and shopping intelligently and economically.

To order: Send \$3.00 a volume to 203 Petrie Hall, Auburn University, Auburn, Alabama 36830.

PROJECT SUMMARY AND SELECTED CURRICULUM MODULES

California Adult Competency Education. A Process Approach to Staff and Curriculum Development for Competency-Based Adult Basic Education.

Description. This well-organized teaching guide presents a variety of unusual and quite imaginative techniques for teaching skills in the knowledge areas of Occupational Knowledge, Consumer Economics, Health, and Government and Law ("Community Resources" seems to be subsumed in Government and Law). There are many "Unfinished Dialogues" which would aid the student in becoming conversant with the vocabulary and practical knowledge of handling such matters as check-writing, credit buying,

and the purchasing of specific things such as life insurance and television sets.

THE FINAL REPORT ON PROJECT CAREER SUCCESS

By Diane Marinelli, Coordinator; Nancy Hess, Instructor; and Patricia Painter, Instructor. Venice-Lincoln Technical Center.

Description. Gives the instructor numerous exercises in the five areas of APL competencies, including: making out budgets, reading want ads, simulating a job interview, identifying community agencies for specific help, writing letters to government officials, describing first aid measures, and telling time. Lists a number of further references/resources and provides addresses of publishers of these materials. Includes summary of APL teacher competencies.

For information: Write Venice-Lincoln Technical Center; K. Duane Rankin, Director; South Fourth Street; Venice, Illinois 62099.

Phone: 618-876-7792 or 876-2222.

APL CURRICULUM GUIDE

APL Curriculum Guide of Pensacola Junior College, School of Education, Department of Adult Basic Education, Pensacola, Florida.

Description. This curriculum guide is based on a coherent general theory of adult functional competency. It states many "goals" and "objectives" for learners in each area of knowledge covered by APL Studies and provides a quite extensive bibliography of related materials. It gives a small number of detailed sample techniques for the transmission of information to the learner.

PROJECT LINK APL/ESL PROGRAM

Kishwaukee College, Malta, Illinois 60150. Phone: 815-825-2086.

Description. Does not attempt to be a comprehensive guide to APL instruction, but rather presents a curriculum unit on banking with useful vocabulary lists, clear exercises, and illustrations.

For information: write above address.

THE APL SERIES: COPING IN TODAY'S SOCIETY

APL Project, University of Texas, Austin, Texas 78712. To be published by Harcourt, Brace, and Jovanovich, available Spring 1979.

Description. Will feature work books in all five knowledge areas of APL. Also reading books, teaching manuals, and various cassettes and other media material will be available.

THE APL SERIES: COPING IN TODAY'S SOCIETY

Harcourt, Bruce, and Jovanovich. Available in Spring 1979.

Description. All five areas, books in each area, teaching manual, workbooks, reading books, audio cassettes, various media material.

LEARNING FOR LIVING

Instructional Module and Compilation of Resources for Adult Basic Education.
Memphis State University.

Description. Bound in a loose-leaf notebook which allows the inclusion of further related material, this is a clearly organized teacher's guide for instruction in Occupational Knowledge. A lucid overview introduces

the guide. There are clear statements of goals and objectives. Learning activities include: compiling a list of sources that may lead to employment, studying a list of words and abbreviations often found in want ads, looking at and analyzing ads, talking on the telephone with prospective employers, and learning about state and public employment agencies.

Includes forms for student evaluation for the "Learning for Living" module.

For information: Write Adult Education Center, 102 Education Building, Memphis State University, Memphis, Tennessee 38152. Phone: 901-454-2136.

THE ADULT PERFORMANCE LEVEL

COMPETENCY-BASED HIGH SCHOOL DIPLOMA PILOT PROJECT

The University of Texas at Austin

Description. Develops criteria and implementation plans for a Competency-Based high school diploma. Explains distinction between "Generalized" and "individualized" competencies. Gives "APL Objectives for Functional Competency" and presents brief guide for instructing "Life Skill Activities."

1975-76 PENNSYLVANIA ADULT BASIC EDUCATION ASSESSMENT PROJECT:

AN EXAMINATION OF THE APL CONSTRUCT AND

MEZIROW'S PROGRAM IMPROVEMENT

Adult Basic Education Section, Department of Education, Harrisburg, Pennsylvania.

Description. Gives a clear and thorough explanation of the application of APL studies. Provides statistical reports of the studies done at Pennsylvania State using APL instruction. A background book, not a

curriculum guide.

For information: Write the above address.

COMMUNITY RESOURCES TEACHER GUIDEBOOK

Project REAL: Relevant Education for Adult Learners. Adult Basic Education, Warren City Schools, Warren, Ohio.

Description. In five volumes (one on each of the five areas of knowledge in the APL studies), this is a handy curriculum guide, clearly written and conveniently and attractively packaged. The "Community Resources" volume covers guidance in the contacting and use of such agencies and/or media as the public library, the postal service, the telephone company, newspapers, and reference books. The "Government and Law" volume defines functions of city, county, state, and national governments. It also explains such matters as voting, taxes, and the rights of tenants and landlords. The "Health and Family Living" volume includes tips on indoor safety, first aid, nutrition, and even some advice on how to help children with their schoolwork.

For information: Contact above listed address.

A CURRICULUM GUIDE FOR ADULT EDUCATORS

Based on the Adult Performance Level Study. Curriculum Research and Development Center, University of Rhode Island.

Description. Introduced by a valuable "Overview of Objectives," this guide is nicely organized throughout. It works within the familiar framework of "goals" and "objectives." A list of resources and a list of behavioral objectives for evaluating student progress are provided. The resources are keyed to various reading levels.

SURVIVAL SKILLS STUDY

A curriculum guide developed by the Pulaski County Adult Education Center, 723 Cumberland Street, Little Rock, Arkansas 72202.

Phone: 375-1121.

Description. "A curriculum guide developed for use by the Pulaski County Adult Education Center for implementation of a curriculum designed to meet the objectives identified by the Adult Performance Level (APL) Study." Community Resources "is not treated as a separate knowledge area but is integrated with the other four areas." The curriculum guide sheets list "What to teach," "How to teach," and "materials" for numerous objectives in Occupational Knowledge and in "Community Life Skills" (Government and Law, Consumer Economics, and Health). Provides "Materials/Resource List." Does not give exercises, tests, etc., for classroom use as do some guides.

For information: See above address and telephone number.

CORPORATION AND OTHER COMMERCIALY PRODUCED MATERIALS ARE AVAILABLE FROM THE FOLLOWING:

The Psychological Corporation
Industrial Services Division
757 Third Avenue
New York, NY 10017 (212) 888-3132

Relevant Productions, Inc.
319 Gulf Blvd.
P.O. Box 68
Indian Rocks Beach, Florida 33535

Career Aids, Inc.
8950 Lurline Ave., Dept. 53
Chatsworth, CA 91311

V. PROJECT SUMMARY AND RECOMMENDATIONS

Summary

The purpose of this project as stated in the proposal "to further bring about the infusion of adult and post-secondary vocational education with an adult performance level competency approach" was successfully accomplished and is described in Chapter 4 under the section entitled: A Model for the Infusion of Adult Performance Level Instruction with Adult and Post-Secondary Vocational Education.

Included in the Instructional Model are the components or distinctive features of the model and are listed as follows: Local Administrators support, Instructor Orientation program, Pre-Test/Post-Test, Priority Ranking of Objectives, Identifying and Securing Resources, Selection of Methods and Techniques, Continued assistance from Project Personnel, and Evaluation.

From the learners pre and post-test scores and the informal teacher evaluations already reported, the model was found to be effective for this group. Several limiting factors to this model should be noted: (1) not all of the 65 objectives listed by the APL study were taught in any class. The number of objectives taught were necessitated by the needs of the learners and the nature of the vocational area; (2) several objectives taught in one vocational area were not applicable to another vocational area; (3) due to the needs of the adults, objectives taught differed in the same vocational areas; e.g., map reading was taught in an urban auto body class but was not found necessary in a class held in a rural area.

In addition to developing and field testing an instructional model, the project also developed two monographs entitled Adult Performance Level Instruction In Vocational Education: A Survey, and APL Curriculum Catalog. The first monograph reports the "State of the Art" in a nationwide survey of adult vocational programs that were described as rising a APL component. The second monograph is a catalog of APL materials that are available and currently in use in Adult Vocational programs.

On the basis of research accomplished through this study the following recommendations are made:

Recommendations

Curriculum Materials

1. Because of the continuing development of curriculum materials, the APL curriculum catalog should be revised frequently.
2. Because of the continuing development of APL curriculum materials and the need to stay current, additional sources of materials should be sought yearly.
3. Although there is a wealth of APL curriculum guides for competency-based education, a larger number of APL guides should be specifically designed or altered for the infusion of competency education into vocational programs.

State of the Art

4. Present indications are that programs for instructing adult vocational learners in APL skills are increasing in number. Another national survey should be conducted within two years to determine the trend of such programs.
5. New sources of information should be discovered to increase the validity of the "state of the art" survey.

Additional Research

6. This study should be replicated using randomly selected instructors divided into experimental and control groups including a wider representation of vocational areas.
7. A comparison study of technical skills of vocational learners in APL infused vocational classes with those in regular vocational classes is needed to confirm or reject the idea that time spent on APL hinders development of technical skills.

REFERENCES

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- Adult functional competency: A summary. Austin, Texas: University of Texas, Division of Extension, March 1975.
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- Edwards, A.L. Statistical analysis. New York: Hall, Rinehart and Winston, Inc. 1969, 3rd ed.
- Fox, D.J. The research process in education. New York: Holt, Rinehart, and Winston, Inc. 1969.
- Lessinger, L.M. Essays in career education. Portland: Northwest Regional Laboratory. 1973.
- Marland, S.P., Jr. Essays in career education. Portland: Northwest Regional Laboratory. 1973.
- Mocker, D.W., A Study to determine competencies needed by ABE/APL teachers. Kansas City, Missouri: Center for Resource Development, University of February, 1976.

APPENDIX A

Outline of the Project

Plan of Action

OUTLINE OF THE PROJECT PLAN OF ACTION

1. Identified post-secondary vocational education programs within the nation reported to be using an APL approach.
 - 1.1 Conducted a literature search including the various relevant clearinghouse holdings and dissertation abstracts.
 - 1.2 Compiled a list of the vocational programs which have purchased the Auburn University produced APL Curriculum Guides.
 - 1.3 Contacted the 78 persons who have participated in National APL Institutes at Auburn University for a listing of vocational programs utilizing the APL approach.
 - 1.4 Contacted the post-secondary vocational officer of each state for a listing of relevant programs.
 - 1.5 Contacted the adult education program officer of each state for a listing of relevant programs.
 - 1.6 Contacted the Federal and Regional vocational and adult education officers for a listing of relevant programs.
 - 1.7 Contacted the vocational education and adult education professional Societies for a listing of relevant programs.
 - 1.8 Contacted university professors of vocational and adult education for a listing of relevant programs.
 - 1.9 Contacted the University of Texas APL Project for a listing of relevant programs.
 - 1.10 Compiled a master list of possible vocational programs reported to be using an APL approach.

2. Described the significant adult and post-secondary vocational education programs within the nation which are using an APL approach.
 - 2.1 Developed and field tested a questionnaire designed to ascertain if and to what extent APL objectives are implemented within the identified vocational program.
 - 2.2 By mail, administered the questionnaire to those programs identified in objective 1.
 - 2.3 Administered two follow-up mailings to non-respondents.
 - 2.4 Made on-site visitations to four of the responding programs.
 - 2.5 Evaluated, codified and identified a generalized pattern within the descriptive data.
 - 2.6 Prepared and disseminated a monograph descriptive of the "state of the art" as determined by objective 1 and 2.
3. Formulated a model for fusing post-secondary vocational instruction with APL concepts which included:
 - 3.1 administrative procedures for implementing such a program.
 - 3.2 procedures for assessing learner competencies.
 - 3.3 procedures for assessing learner needs.
 - 3.4 procedures for recommending learner activities.
 - 3.5 procedures for assessing learner achievement.
 - 3.6 refinement of the model through consultation with an advisory group of vocational and adult education.
4. Secured from selected sources around the nation a collection of curriculum materials now developed or being developed.
 - 4.1 Contacted the adult education program officer of each state for a listing of programs developing APL materials.
 - 4.2 Contacted USOE division of adult education for listing of programs developing APL materials.

- 4.3 Contacted the University of Texas for a listing of programs developing APL materials.
- 4.4 Contacted the 78 persons who have participated in national APL institutes at Auburn University for leads on programs developing APL curriculum materials.
- 4.5 Contacted all programs which have purchased the Auburn University APL Curriculum Guides for leads on programs developing further APL related materials.
- 4.6 Prepared a catalogue of APL vocational materials for dissemination.
5. Piloted the refined models for effectiveness in twelve selected Alabama adult post-secondary vocational programs.
 - 5.1 Selected programs which:
 - 5.1.1 had administrators willing to work with the project
 - 5.1.2 had a minimum of ten students
 - 5.1.3 assessed learner competencies early in the course
 - 5.1.4 helped learners identify needs
 - 5.1.5 assessed the learner's acquired competencies
 - 5.2 Through personal visitations oriented administrators to the purposes and processes of the project.
 - 5.3 Trained the instructors of the twelve participating programs in a two day workshop which included:
 - 5.3.1 University graduate, undergraduate or C.E.U. credit available at trainee's option.
 - 5.3.2 orientation to APL philosophy.
 - 5.4 Implemented the model
 - 5.4.1 Pre-tested all students at the beginning of their course using the nationally normed APL test (American College Testing, 1976).

- 5.4.2 Conducted the post-secondary adult vocational course using the model for infusing APL competencies.
- 5.4.3 Retested students at the end of their course using the APL test (American College Testing, 1976).
- 5.5 Prepared an evaluation report on the effect of infusing adult post-secondary education with an APL competency approach which included:
 - 5.5.1 A measure of APL competency gains and the degree to which such gains were statistically significant.
 - 5.5.2 Information concerning the affective responses of instructors and students.
 - 5.5.3 Information to allow for replication of the study.
6. Evaluated the project.
 - 6.1 Continual feedback of evaluative material was given from the Alabama State Department of Education, project participants and learners.
 - 6.2 Check points for accuracy of staff actions are provided in objectives 5.4.3.
 - 6.3 Summative evaluation is to be conducted by a third party evaluator and will be included in final project report.

APPENDIX B

Questionnaire

Composite Evaluation

COMPETENCY-BASED ADULT AND POSTSECONDARY VOCATIONAL EDUCATION
UTILIZING THE ADULT PERFORMANCE LEVEL APPROACH

AUBURN UNIVERSITY
DEPARTMENT OF VOCATIONAL AND ADULT EDUCATION

OCTOBER 1977

Name _____
Position _____
School _____
Address _____
Telephone _____

How many years of teaching experience have you had? _____

How many years of experience have you had teaching adult vocational education? _____

Do you presently hold a teaching certificate? _____

What kind? _____

How long have you included APL skills as part of the curriculum? _____

Is your present position part-time or full-time? _____

What is your service area in Vocational Education? _____
(Trades and Industrial, Business and Office Education, etc.)

In what type of institution are you working?

- _____ community college
_____ technical school
_____ area vocational center
_____ correctional institution
_____ other (please specify) _____

What is the population of the area served by your school (nearest 1,000)? _____

What is the setting of the area served by your school? (please circle)

rural, suburban, urban, inner city, other (please specify) _____

Your first contact with the APL Studies was through:

- _____ news media
- _____ local school administrators
- _____ fellow instructors
- _____ state department of education
- _____ workshop (please specify) _____
- _____ national meetings (please specify) _____
- _____ other (please specify) _____

The decision to use APL skills as content in adult vocational class was primarily the decision of:

- _____ school or program administrators
- _____ instructor
- _____ other (please specify) _____

The decision to use APL is primarily based on:

- _____ learners' requests
- _____ learners' needs
- _____ national findings recently published
- _____ other (please specify) _____

If this decision was made by administrators, what were the instructors' responses?

- _____ favorable because _____
- _____ unfavorable because _____



If this decision was made by instructors, what were the administrators' responses?

_____ favorable because _____

_____ unfavorable because _____

In cases where APL related learning may not have been readily accepted by learners, instructors, or administrators, what means were successfully used to gain eventual acceptance?

In this class learners' needs and competencies are assessed or estimated by:

_____ instructor-made tests

_____ commercially produced tests

_____ standardized tests

_____ observation by instructor of learners' reaction to learning situations

_____ reports from employers of former learners

_____ reports from former learners

_____ reports from administrators

_____ other (please specify) _____

Learners' achievement is assessed by:

_____ instructor-made tests

_____ commercially produced tests provided with instructional materials

_____ standardized tests

_____ instructor observation and records of progress

_____ other (please specify) _____

What are some means that you use to promote a continuing interest in self-improvement through further education by formal and informal means (life-long learning)?

Below is a grid listing basic skills for each general knowledge area of the Adult Performance Level Studies. Please circle A (always), S (sometimes), or N (never), based on how much you include these skills in each area as objectives in your curriculum.

GENERAL KNOWLEDGE AREA

BASIC SKILLS

	Community Resources	Occupational Knowledge	Consumer Economics	Health	Government and Law
Reading	A S N	A S N	A S N	A S N	A S N
Writing	A S N	A S N	A S N	A S N	A S N
Computation	A S N	A S N	A S N	A S N	A S N
Problem solving	A S N	A S N	A S N	A S N	A S N
Interpersonal relationships	A S N	A S N	A S N	A S N	A S N

In using basic living skills in your curriculum, do you teach them at separate times or do you integrate them with the vocational skills? Please explain.

Please list materials successfully used in teaching APL skills and attach or describe materials or ideas produced locally.

Competency-based Adult Vocational Education Project
Composite Evaluation
November, 1977, Workshop

1. On the whole, this workshop was
 - above average - 14
 - average - 3
2. The objectives of this workshop were
 - appropriate and achieved - 16
 - appropriate but not achieved-- 1
3. I think that the information I received during this workshop will
 - help me a great deal in my work - 16
 - help me to some extent in my work - 1
4. I am leaving this workshop feeling
 - encouraged - 14
 - all right - 3
5. What did you like most about this workshop? Why
 - Friendly people; workshop was very open and realistic.
 - Being new in the APL area, I liked all information. I now have something to work with.
 - Undecided.
 - Recognized for credit.
 - Preparing lesson plans. Gives opportunity to test knowledge of material presented and immediate feedback.
 - Because it was educational to the teacher. It was presented in a very explicit manner.
 - The encouragement given by the staff. A lot of information was given out (sheet form).
 - Keeping on schedule. The clear and concise way the leaders presented the format. All objectives were achieved.
 - Well organized. Productive. Interesting. Varied activities.
 - The fact that we as educators are trying to help those people in our society to function in a manner to help upgrade their needs and ours.
 - Organization of the materials and information as given.
 - It was very informative and I can really do a better job in my instructional program.
 - The direct approach to material. Gave indication of direction.
 - Individualized help.
 - Friendly people.

6. What did you like the least about this workshop? Why?

Hours! Could have been shorter over 2 full days instead of late on night 1 and long on day 2.

80

Continued

Too many demonstrations by participants. Once you know how to do something, move on to something else.

Meeting on weekend.

I felt this workshop was very beneficial. The drive was long.

The timing between the tape and slides.

The repetition of lesson plans

Long drive

No complaints - 8

7. What suggestions would you make for improvement in future programs of this type?

Break it down into two days rather than one night and one day.

After driving long distance, difficult to sit for long hours.

More state wide recognition for work done by participants in this type program.

Shorten the time for people to fill out their instructional planning sheets.

To give overview of workshop - relating to ... situation.

Workshop closer to working area.

More time to think about some of the materials presented.

Subject more people to this type of workshop.

Maybe meeting in a central place - like Birmingham.

More time.

Maybe a little more organized, such as having transparencies on instructional planning sheets complete before presenting them to class.

No comment - 5.

8. Additional comments:

Was one of the best informative workshops I have ever attended.

Time schedules very well planned.

Keep assigned presentations, such as our overhead projector presentation from being repetitious.

This was a nice workshop. Love the atmosphere at Auburn University.

I really enjoyed your workshop.

Very helpful.

It was very well implemented and each teacher seemed to take part in the work.

One of the most productive workshops I've attended. Seemingly everyone became knowledgeable about how to infuse APL into his area.

Very congenial group!

No comment - 7

APPENDIX C

Third Party Evaluation Report

THIRD PARTY EVALUATION REPORT

W. C. Clayton
Third Party Evaluator

The Project Director and Staff furnished the third-party evaluator all data related to the project and cooperated with the third-party evaluator throughout the duration of the project.

The evaluator visited three class conferences and consulted with the project director, staff, and program participants on each occasion.

Because of the effectiveness and accomplishments of the workshops, the process employed to assist the vocational instructors to introduce Adult Performance Level (APL) Guidelines into their programs could be utilized to greatly expand the competency base.

On the bases of member participation, member comments, and evaluation documents, the project objective of training vocational education instructors to incorporate APL guidelines into their vocational curricula was effectively achieved.

The project director, Dr. Harry Frank, was extremely familiar with both vocational and APL curricula as well as directing class members in approaches to utilize in coalescing the two curricula materials. It was also very obvious that a superb job had been done in organizing the project so as to achieve maximum results in a minimum of time.

The staff members actually conducting the workshop activities were well organized, very competent, and exceptionally enthusiastic. They related well with the participants and played a large role in the smooth operation and attainment of the primary objective.

Most outstanding, however, were the vocational instructors who participated in the workshops. They were competent, knowledgeable in their fields, and concerned about improving their performances.

Means to determine effectiveness of the program included observations, conversations, instructor comments, and evaluation documents. The most effective device, however, proved to be the presentation by each participant to the remainder of the group on the experiences in incorporating the guidelines into his ongoing vocational program and the reactions of his students.

FINDINGS

1. The program was especially effectively organized and operated.
2. The program instructors were competent and efficacious.
3. The vocational instructors selected comprised a well-diversified selection.
4. All of the vocational instructors were enthusiastic in their support of APL Guidelines and heartily endorsed inclusion of them into vocational programs.
5. None of the vocational instructors foresaw any difficulty in including the guidelines into their program or any resistance to the guidelines by students, although it was agreed some classes of students could benefit appreciably more than others.
6. Participating in an activity of this nature which was so deftly operated, and so effectually successful proved to be exceptionally pleasurable and rewarding.

APPENDIX D

Names and Addresses of:
Project Staff, Instructors,
Advisory Board, Key Punch Operator,
and Statistical Analysis

Project Staff

Dr. Harry Frank
Project Director
203 Petrie Hall
Auburn University
Auburn, AL 36830

Dr. Norma B. Brewer
Project Corrdinator
203 Petrie Hall
Auburn University
Auburn, AL 36830

Mrs. Maragret Peters
Assistant Coordinator
203 Petrie Hall
Auburn University
Auburn, AL 36830

Mrs. Connie Preston
Project Secretary
203 Petrie Hall
Auburn University
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Advisory Committee

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Auburn, AL 36830

Dr. Brent Halverson
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Auburn University
Auburn, AL 36830

Dr. Russell Wilson
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Auburn University
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Key Punch Operator

Liz Davis
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Auburn, AL 36830

Typist

Marilyn Worthington
203 Petrie Hall
Auburn University
Auburn, AL 36830

APPENDIX E

Memorandum of Agreement

First Workshop Agenda

Needs Assessment Form - Form 3

Instructional Planning Sheet - blank
Instructional Planning Sheet - completed

Instruction Planning Sheets

Example of Each

Project Instructor Planning Sheet

Final Workshop Agenda

AUBURN UNIVERSITY

AUBURN



ALABAMA

36830

SCHOOL OF EDUCATION

Vocational and Adult Education
203 Petrie Hall

Telephone 826-4271
Area Code 205

This agreement, entered into on the _____ day of October, 1977,
between the project "Competency-Based Adult and Postsecondary
Vocational Education Utilizing the Adult Performance Level Approach"
_____ has the following stipulations. The
instructor shall:

1. conduct an Adult Vocational Education class (non-credit) which shall begin in January or February, 1978.
2. devote at least one-sixth of teaching time to infusing basic life skills with vocational skills, i.e., if total teaching time is 72 hours, 12 hours will be used for infusing basic life skills with vocational skills.
3. develop materials in accordance with the goals of the project.
4. collect pre- and post-test data from each learner.
5. recruit adult learners without regard to race or sex.
6. allow for duplication and dissemination of any instructional materials developed in the project.
7. participate in teacher-training workshop November 18-19 at Auburn University.

The Competency-Based Adult and Postsecondary Vocational Education Project shall:

1. pay a stipend of \$450.00 for a 72 hour course or a pro rata share of \$450.00 for less than a 72 hour course.
2. pay per diem of \$25.00 for workshop plus travel to and from the workshop not to exceed \$50.00.
3. pay \$50.00 for instructional supplies.

This agreement period is from October 1, 1977, through August 31, 1978.

Please sign one form and return to Project Director and retain the second form for your records.

Project Director

Instructor

B.

COMPETENCY-BASED ADULT VOCATIONAL EDUCATION PROJECT WORKSHOP

November 18-19, 1977

Auburn University Student Union

Workshop Objective - to infuse APL objectives and learning activities
with Vocational objectives and learning activities

WORKSHOP AGENDA

Friday, November 18

- 6:00 p.m. Welcome - Woody Buckelew
- 6:15 p.m. Introduction to the Adult Competency-based
Education Project Norma Brewer
- 6:30 p.m. Introduction to the Adult Performance
Level (APL) Study Dr. Harry E. Frank
- 7:45 p.m. Teacher Competencies Bill Clayton
- 8:00 p.m. BREAK
- 8:15 p.m. Presentation of APL Objectives and Tasks Norma Brewer

Saturday, November 19

- 8:30 a.m. Problems?
APL Test by Knowledge Areas
Concept of Infusion
Demonstration Lesson
Questions and Answers. Dr. Harry E. Frank
Norma Brewer
Margaret Peters
- 10:00 a.m. BREAK
- 10:15 a.m. Group work to develop sample
lesson plans Margaret Peters
- 12:00 p.m. LUNCH-War Eagle Cafeteria
- 1:00 p.m. Finish group work Norma Brewer
- 1:30 p.m. Presentation by groups
- 2:30 p.m. Instructions on testing learners Margaret Peters
- 3:00 p.m. BREAK
- 3:15 p.m. Brain Storming for future Norma Brewer
- 4:15 p.m. Complete travel forms Connie Preston

Dr. Harry E. Frank, Project Director
Norma Brewer, Project Coordinator

Margaret Peters, Assistant Project
Coordinator
Connie Preston, Project Secretary

Competency-based Adult Vocational Education Project
Form 3
Needs Assessment for Determining Learner Activities

Learner's Name _____
Subject Area _____
School _____

Date Tested _____
Instructor's Name _____

Item Analysis	Designator	Task Applies to Vocational Subject		Task Taught
		Yes	No	
1. Addressing envelopes	OK6,T1 OK6,T5 OK7,T9			
2. Using telephone book	OK5,T1 OK6,T1			
3. Information sources	CR2,T1 CR5,T1			
4. Computation of costs	CE16,T11			
5. Social Security forms	OK9,T3 OK9,T4			
6. Traffic laws	CR5,T1 CR5,T2			
7. Read bus schedule	CR5,T3 CR5,T1			
8. Read a map	CR2,T2 CR5,T1			
9. Job information resources	OK2,T1 OK2,T2			
10. Employee rules and policies	OK6,T2 OK7,T3			
11. Job benefits	OK6,T7 OK9,T8			
12. Compute working time	OK9,T1 OK9,T2			

Item Analysis	Designator	Task Applies to Vocational Subject		Task Taught
		Yes	No	
13. Job application form	OK6,T2 OK6,T3			
14. Computing percentages	CE3,T1			
15. Job information sources	OK2,T1 OK2,T2			
16. Labor union terminology	OK7,T6			
17. Read insurance chart	CE17,T4			
18. Read government document	CE13,T2			
19. Credit terminology	CE16,T4			
20. Misleading advertising	CE10,T1 CE10,T2			
21. Why sales are held	CE6,T1 CE9,T1			
22. Computing percentages	CE2,T6 CE 13			
23. Understanding government reports	CE2,T6 CE13			
24. Making a budget	CE16,T8 CE16,T11			
25. Safety measures	He,T1			
26. Computing calories	H10,T6 H10,T7			
27. Reading birth control charts	H4,T2			
28. Reading cigarette chart	H4,T2			
29. Effective communication	H1,T1			
30. List emergency phone numbers	H4,T1			
31. Consumer protection	GL6,T1			

Item Analysis	Designator	Task Applies to Vocational Subject		Task Taught
		Yes	No	
32. Reading labels	H1, T3			
33. Public defender laws	GL4, T1			
34. How taxes are spent	GL7, T1 GL7, T2			
35. Compute simple majority	G11, T1			
36. Political terminology	G11, T1			
37. Understanding lease forms	GL4, T2			
38. Effective communication	G12, T2			
39. Compute prison term	G14			
40. Understanding rights after arrest	G14, T3			

COMPETENCY-BASED ADULT VOCATION EDUCATION PROJECT

Form I

Instructions for completing the worksheet

November 18, 1977

- Step I - List the broad Vocational goal for a lesson.
- Step II - In the Specific Knowledge and Skills column, list the specific steps that a learner should take in order to achieve the goal.
- Step III - For each specific step, list the APL designator if one is appropriate.
- Step IV - For each specific step, list the learner activity; that is, what the learner should do in order to achieve the goal.
- Step V - For each specific step, list the resource (media or materials) that should be used in order to achieve that goal.
- Step VI - For each specific step, list the progress check that should be used in order to assure the learner that he is proceeding correctly to meet the specific goal.
- Step VII - Continue this process until all specific knowledge and goals, activities, resources and progress checks have been listed.
- Step VIII - A final progress check should be included for each broad objective in order to allow the learner to demonstrate his knowledge of the broad Vocational Objective and the infused APL skills.

Competency-based Adult Vocational Education Project

Form 1

INSTRUCTIONAL PLANNING SHEET

Course: _____

Instructor _____

Broad Vocational Objective: _____

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check

D. Continued

Competency-based Adult Vocational Education Project

Form 1-

INSTRUCTIONAL PLANNING SHEET

Course: Nursery Production

Instructor _____

Broad Vocational Objective: Treating Soil with Soil Fumigants

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. identify problem APL - calculating surface area (CE2,5)	1.1 view slides 1.2 discuss problem 1.3 measure area to be fumigated	1.1 projector (extension cord) 1.2 slides 1.3 script 1.4 rulers	1.1 instructor check (oral questions)
2. select fumigant APL - reading labels (H1, T6)	2.1 view slides 2.2 follow instructions on handout about appropriate fumigant 2.3 compare labels on fumigants	2.1 projector 2.2 slides 2.3 script 2.4 handout, <u>Application of fumigant</u> 2.5 labels	2.1 instructor check
3. prepare soil	3.1 view slides 3.2 follow instructions on handout about preparation of soil	3.1 projector 3.2 slides 3.3 script 3.4 handout, <u>Application of Fumigant</u> 3.5 hoe, rake	3.1 observation of participation.
4. seal plastic covering APL - calculating surface area (CE2, T5)	4.1 view slides 4.2 follow instructions on handout about sealing plastic covering	4.1 projector 4.2 slides 4.3 script 4.4 handout, <u>Application of Fumigant</u>	4.1 observation of participation

Form

INSTRUCTIONAL PLANNING SHEET

Course: Nursery Production

Instructor _____

Broad Objective: Treating Soil with Soil Fumigants

Specific Knowledge Points	Learner Activity	Resources (Media and Materials)	Progress Check
<p>5. Apply fumigant according to manufacturer's recommendations (T6)</p> <p>Read labels (T6)</p> <p>Keep first aid kit</p> <p>Use protective clothing (H3, T1)</p> <p>Use health services</p>	<p>5.1 view slides</p> <p>5.2 read instruction handout for applying fumigant</p> <p>5.3 use kits for fumigant</p> <p>5.4 use safety kit</p> <p>5.5 use safety kit</p> <p>5.6 use emergency numbers</p>	<p>5.1 projector</p> <p>5.2 slides</p> <p>5.3 script</p> <p>5.4 handout, <u>Application of Fumigant</u></p> <p>5.5 fumigant measuring utensils</p> <p>5.6 first aid kit</p> <p>5.7 phone book</p>	<p>5.1 learners list all steps in the process of applying soil fumigant to soil, including safety precautions</p>

Competency-based Adult Vocational Education Project

Form 1

INSTRUCTIONAL PLANNING SHEET

Course: Nursery Production

Instructor: David Glover

Broad Vocational Objective: Proper selection of nursery site

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Select site APL - Consumer guides to select best buys CE-5, T-1	1. Discuss location assets as viewed	1. Site area	
2. Check zoning and building codes APL - Build consumer vocabulary CE-1, T-1, T-2	2a. Go to government office and actually check papers 2b. Prepare written excerpts	2a. Government office 2b. Resource person	2. Instructor check
3. Determine accessibility APL - Use consumer guides to determine best buys CE-5, T-3	3. Average the hours of concentrated traffic	3a. Traffic 3b. Survey 3c. Clock	
4. Determine soil, climatic conditions and water	4a. Take soil sample 4b. Assess any possible problem 4c. Interpret results 4d. Sample water	4a. Shovel 4b. Containers 4c. Transient level	4a. Participation 4b. Oral questions
5. Evaluate	5. Review procedures	5. Knowledge gained	5. Discussion

Form **INSTRUCTIONAL PLANNING SHEET**

Course Oxy-Acetylene Welding

Instructor Paul Vaughn

Relevant Vocational Objective: Gas Weld Carbon Steel

Subject Knowledge and Skills	Learning Objectives	Resources (Media and Materials)	Program Check
1. Weld carbon steel joints 2. Working conditions in terms of health and safety of the worker OK-7, T-5	1. a. View films, clean plates, identify different kinds of weld joints b. Weld carbon steel joints 2. Study safety rules (oxy-acetylene) films	1. Projector, films, and metal plates	1a. Check instructor 1b. Written test from text 2. Instructor checks oral test

Competency-based Adult Vocational Education Project

Form 1

INSTRUCTIONAL PLANNING SHEET

Course: Carpentry

Instructor Charles Thiipen

Broad Vocational Objective: Mix hot glue and application of same

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Use of hot glue APL H-1, T-6 APL H-8, T-2, T-3	1. Discussion 1b. Reading labels Discuss safety	1a. Product handout 1b. Label (product) 1c. APL Guide from Auburn University	
2. Mix glue to label specifications	2. Mixing	2. Product	2. Check mixture
3. Apply to test material	3. Application		3. Check dry product

Course: Business - Accounting

Instructor Huion Nunn

Broad Vocational Objective: Review test - Chapter 7 and 8. "Where Should I Look for Job Openings?" and

"The Employment Application"

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Review of test-Chap. 7 & 8	1. Question & answer session pertaining to test	1a. Test 1b. Textbook 1c. Workpapers for Chap. 7 & 8 1d. Pen, pencil, ruler, & paper	1. Participation in review
2. Acquaint student with terms found in employment ads APL OK-1, T-1, T-2, T-3, APL OK-6, T-1	2a. Review newspaper ads & pamphlets 2b. Question & answer session 2c. Lecture by instructor	2a. Newspaper ads and employment pamphlets 2b. Pen and paper	2. Class participation
3. Acquaint students with employment application APL OK-1, T-1, T-2, T-3 APL OK-6, T-8	3. Review and work on job application	3a. Job applications 3b. Pen, pencils, ruler, and paper	3. Check students' work

Competency-based Adult Vocational Education Project

Form 1

INSTRUCTIONAL PLANNING SHEET

Course: Auto Body Repair

Instructor James E. Cheeseboro

Broad Vocational Objective: Refinishing and Painting

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Clean and dry surface to be painted APL H-1, T-6, Reading labels	1a. View slides 1b. Lecture-demonstration 1c. Read assigned pages in textbook	1a. Projector (extension cord) 1b. Slides 1c. Film loops	1. Written test
2. Select sand paper APL H-1, T-6, Reading labels	2a. View film loops 2b. Follow instructions in film loop	2a. Projector 2b. Film loops	2. Oral test
3. Sand surface	3a. View film loop 3b. Follow instructions in manual	3a. Projector 3b. Film loop 3c. Dupont Refinishing Manual	3. Observation of participation
4. Mix primer-surface APL CE-2, T-6, Using Measuring Equipment	4. Follow instructions in Dupont manual	4. Dupont Refinishing Manual	4. Observation of participation
5. Apply primer-surface APL H-3, T-4, Safety	5. View film loop	5a. Film loop 5b. Projector	5. Observation of participation

Course: Greenhouse Management and Operations

Instructor Troy D. Newton

Broad Vocational Objective: Fertilize Plants

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Interpret soil test report APL - services available CR-2, T-1, T-5, and T-6	1a. View film 1b. Review soil test recommendations	1a. Film - "Fertilizing Ornamental Plants" 1b. Projector, etc. 1c. Soil test results	1. Oral questions
2. Selecting fertilizer to use APL - safety H-8, T-3 APL - weights & measures, CE-2, T-3, T-6	2a. View film 2b. Discussion of film 2c. Check ph of soil	2a. Film 2b. Projector, etc. 2c. Fertilizer & label from fertilizer bag 2d. ph meter	2. Check test results
3. Application APL - safety, H-8, T-3	3a. View film 3b. Discussion of film 3c. Apply fertilizer 3d. Water in	3a. Film 3b. Projector, etc. 3c. Containers or applicators 3d. Fertilizer 3e. Lime (if needed) 3f. Water & hose	3. Observation of application

Competency-based Adult Vocational Education Project

Form 1

INSTRUCTIONAL PLANNING SHEET

Course: Auto Body Repair

Instructor L.C. Rhone

Broad Vocational Objective: Clean and prepare surface for painting

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Select proper tools and material APL - OK-1, T-1	1. Get proper tools and materials	1. Have a repaired area that needs painting.	1. Check for proper tools and materials.
2. Remove all dirt and dust on and around repaired surface.	2. Air blow all dust and dirt from surface to be painted.	2. Get cleaning solvent and clean wiping cloth.	2. Check for proper smoothness of surface
3. Remove all foreign material from surface.	3. Smooth with sandpaper.	3. Get sandpaper for smoothing.	3. Check for proper cleaning.
4. Sand as required	4. Tack with tack rag.	4. Have tack rag ready for removing dirt and dust.	
5. Tack surface free of dust and dirt with tack rag.		5. Read all labels on produce being used.	

Course: Welding

Instructor Jimmy Young

Broad Vocational Objective: Manual Flame Cutting

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Terminology APL - Vocabulary OK-1, T-1, T-2, T-3	1. Hand-out on oxygen-acetylene, torches and tips	1. Hand-out	1. Oral test
2. Principles of cutting	2. Discuss and identify apparatus that goes with oxygen-acetylene cutting outfit.	2. Bottle of oxygen, acetylene, gauges, hoses, body, torch, and tip	2. Oral and performance test
3. Flame adjustment	3. Light and adjust torch for cutting metal	3. Flint lighter, reference to discussion of apparatus and principles	3. Performance test
4. Safety APL - Clothing and protection H-2, T-1	4. Handout on safety rules of oxygen-acetylene	4. Eye protection, clothing	4. Oral and performance
5. Techniques	5. Tip selection, pressure adjustment	5. Pressure settings Tip size Lead angle	5. Learner will safely assemble torch, regulators, and hoses. Learner will light and adjust flame, then cut metal to workmanship sample

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Competency-based Adult Vocational Education Project

Form 1

INSTITUTIONAL PLANNING SHEET

Course: Clothing Construction

Instructor Frances LeSueur

Broad Vocational Objective: Making a budget to develop and understand budgeting techniques

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Identify budget APL CE-16, T-8	1. Study booklet	1. Booklet - "A Guide to Budgeting for Family" Extension Service	1. Observation
2. Prepare a sample budget; weekly, monthly, or yearly APL CE-16, T-11	2. Discuss - "Why Budget?"	2. See above resource 2b. <u>How a Practical Family Managed its Money</u> , from "Changing Times"	2. Oral discussion
3. Estimated income	3. Design a chart for family income	3a. Extension Service 3b. Local bank	3. Instructor observation
4. Investigate record keeping forms APL CE-16, T-12	4a. Discuss records 4b. Study precautions in permanent and temporary records	4a. Pamphlets 4b. Mimeographed forms 4c. <u>Budgeting Game</u> , from "Changing Times"	4a. Observation 4b. Oral participation
5. Set up a sample form for family spending	5. Use mimeographed materials	5a. <u>Budgeting for Family</u> 5b. Handouts ordered material	5a. Discussion 5b. Observation

Course: Welding

Instructor Sam Vinson

Broad Vocational Objective: To define occupational categories in terms of education and job experience required and to rate these categories in terms of desirability, and match the individual's real qualifications with job requirements.

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Assist learner in making a realistic assessment of his qualifications in terms of <ul style="list-style-type: none"> a. age b. health c. physical limitations d. education e. job experience f. long range objectives g. willingness to adjust to unusual hours or conditions 	1. Make a personal inventory of your qualifications, including items listed by instructor and compare your qualifications with a job description from a local industry	<ul style="list-style-type: none"> 1a. Transcript of grades in high school 1b. Certificates of technical courses taken in school 1c. Birth certificate 1d. Condition of health; doctor's statement 1e. Hourly job description from local industry 	<ul style="list-style-type: none"> 1a. Check material 1b. General discussion 1c. Oral or written test.

APL - OK-3, T-5

Competency-based Adult Vocational Education Project

Form 1

INSTRUCTIONAL PLANNING SHEET

Course: Typing II Refresher

Instructor Cathy Clement

Broad Vocational Objective: Typing Manuscripts

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
<p>1. To be able to read and interpret the meaning of certain parts of a labor union contract APL - OK-6, T-40</p>	<p>1. Class participation terms found in a labor union contract. Question and answer session conducted by instructor</p>	<p>1a. Copy of a labor union contract 1b. Dictionary</p>	<p>1. Observation by instructor</p>
<p>2. Type a manuscript, using the labor contract as a guide after directions for placement from instructor and handout OK-6</p>	<p>2. Type a one-page manuscript according to directions from instructor</p>	<p>2a. Copy of labor union contract 2b. Typewriter, paper 2c. Handout</p>	<p>2. Check by teacher</p>
<p>3. List in proper order the steps to be taken when applying for employment APL - OK-5, T-25</p>	<p>3a. Make notes as guest speaker from local industry (personnel officer) gives talk on the steps to take when applying for employment 3b. Review booklet with instructor entitled "How to--prepare yourself for job interviews"</p>	<p>3a. Personnel officer from TVA 3b. Chalkboard, paper, pencils 3c. Booklets</p>	<p>3. Observation</p>

Course: Typing II Refresher (Continued)

Instructor Cathy Clement

Broad Vocational Objective: Typing manuscripts

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
<p>4. Arrange and type in one-page manuscript form the notes taken from previous exercise OK-5, T-25</p>	<p>4. Compose notes and type in logical order a one-page manuscript</p>	<p>4a. Sample manuscripts 4b. Typewriter 4c. Correction fluid, paper</p>	<p>4. Check by instructor for 95% accuracy.</p>

Competency-based Adult Vocational Education Project

Form 1

INSTRUCTIONAL PLANNING SHEET

Course: Radio TV Repair

Instructor Johnny H. Spears

Broad Vocational Objective: Given a TV set with a faulty feed through capacitor, necessary tools and equipment, check and replace capacitor

Specific Knowledge and Skills	Learner Activity	Resources (Media and Materials)	Progress Check
1. Use of manufacturers' specifications	1. Learner checks feed through capacitors according to manufacturers specifications	1. Manufacturers' specifications	1. Instructor check
2. Use of multimeter	2. Learner uses multimeter to check resistance and voltage of feed through capacitor	2. Multimeter	2. Instructor check
3. Read and use indexes APL CR-6, T-1	3. Learner locates replacement part number	3. Manufacturers' specifications	3. Instructor check
4. Identify price and quality of replacement APL CE-7, T-2	4a. Learner prices replacement parts 4b. Learner practices procedures 4c. Learner performs	4. Wholesale and retail pricing guide	4. Instructor check

COMPETENCY BASED ADULT VOCATIONAL EDUCATION PROJECT
 FINAL WORKSHOP
 May 13, 1978

TIME	SESSION	MATERIALS	STAFF
9:00	Welcome		Dr. Richard Baker
9:15	APL Survey Test	Test, pencils	Dr. Norma Brewer
10:00	BREAK		
10:15	State of the Art		Mrs. Margaret Peters
10:45	Discussion on Infusion		Dr. Norma Brewer
11:00	Self-evaluation on APL understanding	APL Educator Competency forms	Dr. Norma Brewer
11:15	Explain afternoon activities		Dr. Norma Brewer
11:30	LUNCH		Dr. Harry Frank Mr. Bill Clayton
1:30	Presentations	Video tape	Group
3:00	Evaluation of the Project	Evaluation forms	Group
3:30	Check-out Turn in ALL materials on the checklist	Travel forms	Mrs. Margaret Peters