

DOCUMENT RESUME

ED 232 046

CE 036 559

TITLE Agricultural Processing and Marketing. Final Report.

INSTITUTION James Madison Univ., Harrisonburg, Va.

SPONS AGENCY Virginia State Dept. of Education. Richmond. Div. of Vocational Education.

PUB DATE 15 Jun 83

NOTE 112p.

PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC05 Plus Postage.

DESCRIPTORS *Agricultural Education; Articulation (Education); Behavioral Objectives; Competence; *Competency Based Education; *Crop Processing Occupations; *Curriculum Development; Instructional Materials; *Marketing; *Material Development; Recordkeeping; Secondary Education; State Curriculum Guides; Vocational Education

IDENTIFIERS Virginia

ABSTRACT

A vocational guidance project was conducted in Virginia to identify a valid list of tasks/competencies for three levels of agricultural processing and marketing (AG-PAM) courses for secondary students. These competencies were then to be presented in a competency-based instructional resource guide for such courses. The project developers followed these steps: (1) contacted local school vocational administrators where AG-PAM is taught in order to establish sound communication and cooperation; (2) researched existing curriculum development efforts; (3) formed a committee with representatives from local agricultural businesses; (4) identified, sequenced, and determined the levels of difficulty of competencies for AG-PAM; (5) arranged competencies into logical teaching units and courses and developed course outlines; (6) constructed performance objectives, developmental competencies, and criterion-referenced tests; (7) listed appropriate learning activities, tools and materials, reference materials, and audiovisual materials needed for each competency or performance objective; (8) developed a format for a competency recordkeeping system; (9) developed an instructional management system; and (10) prepared a competency-based instructional resource guide for agricultural processing and marketing that is ready for review and processing by the Virginia Department of Education. It was concluded that contracting with a curriculum specialist to work cooperatively with an advisory committee is a practical approach to competency-based curriculum development and that this procedure should be used to develop additional curriculum materials. (KC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

1A 79133-2

Final Report

ED232046

AGRICULTURAL PROCESSING AND MARKETING

A Vocational Guidance Project

Conducted Under

Vocational Education Amendments of 1976

Public Law 94-482

Charles W. Curry, Project Director

Ann Parsons, Curriculum Specialist

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it
Minor changes have been made to improve
reproduction quality

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

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

H. L. Smith

June 15, 1983

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

5036559

This project was conducted in accordance with a contract with the Virginia Department of Education, Divisions of Vocational Education. Contractors undertaking projects under such sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Virginia Department of Education positions or policies.

TABLE OF CONTENTS

	Page
ABSTRACT	vii
NARRATIVE	1
Title	1
Problem	1
Goals and Objectives	1
Project Design	2
Accomplishments	3
Evaluation	7
Conclusions, Implications and Recommendations	7
APPENDICES	
Appendix A - AG-PAM Advisory Committee Members	9
Appendix B - AG-PAM Advisory Committee Meeting Agenda June 24, 1982	13
Appendix C - Suggestions, Comments and Recommendations of AG-PAM Advisory Committee	17
Appendix D - AG-PAM Advisory Committee Meeting Agenda April 29, 1983	21
Appendix E - Evaluation Committee Members	25
Appendix F - Survey Instrument - Technical Content Areas	27
Appendix G - Survey Instrument - Employability Content Areas	55
Appendix H - Representative Occupations in Agricultural Processing and Marketing	81
Appendix I - Balance Sheet	85

ABSTRACT

TITLE - Agricultural Processing and Marketing (AG-PAM)

PROJECT DIRECTOR - Dr. Charles Curry

INSTITUTION - James Madison University

LOCATION - Department of Distributive and Industrial Education
108 Keezell Hall
James Madison University
Harrisonburg, VA 22807

FUNDING PERIOD - July 1, 1981 - June 30, 1982

OBJECTIVES OF PROJECT

1. To identify and/or develop a valid list of tasks/competencies for Agricultural Processing and Marketing III, IV, and V.
2. To develop a product titled Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing.
3. To evaluate the product developed.

PROCEDURES OF IMPLEMENTATION

1. Contact local school division vocational administrators where AG-PAM is taught and establish sound communications and a commitment for cooperation.
2. Research existing curriculum development efforts in AG-PAM.
3. Form an Agricultural Processing and Marketing Advisory Committee with representatives from local agricultural processing and marketing businesses.
4. Identify the terminal competencies needed by students at the secondary level of instruction for AG-PAM.
5. Identify the occupational titles for AG-PAM.
6. Sequence competencies into a logical order for instruction.
7. Determine levels of difficulty for competencies.
8. Arrange competencies into logical teaching units and courses.
9. Develop course outlines.
10. Construct performance objectives.
11. Identify developmental competencies.
12. Construct criterion-referenced measures.
13. List appropriate learning activities for each competency.
14. List tools and materials needed to complete the performance objective.
15. List appropriate reference materials for each performance objective.
16. List appropriate audio-visual materials.
17. Develop a format for a competency recordkeeping system.
18. Develop instructional management system.
19. Prepare a Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing.
20. Evaluate the final product.

RESULTS/ACCOMPLISHMENTS

The resource guide titled Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing, was researched, validated, written and edited. It is ready for review and processing by the Virginia Department of Education.

EVALUATION

The completed guide was reviewed by the AG-PAM Advisory Committee. Changes were made where necessary.

CONCLUSIONS, RECOMMENDATIONS

It is concluded that contracting with a curriculum specialist to work cooperatively with a technically competent advisory committee is a practical approach to competency-based curriculum development. It is recommended that this procedure be used to develop other curriculum materials for vocational education.

ANNUAL REPORT

NARRATIVE

Title: Agricultural Processing and Marketing (AG-PAM)

Problem: The standards of quality and objectives for public schools enacted by the Virginia General Assembly emphasize the importance of vocational education by stating that a goal of public education must be to enable each student, upon leaving school, to successfully enter the world of work or to continue in a program of advanced education. The goal further stated that each school division shall provide programs acceptable to the Board of Education that offer vocational education providing marketable skills for students who are not planning to continue their education beyond high school and that those students not completing their public school education possess the basic skills and attitudes commensurate with their capabilities to obtain employment upon leaving school.

One of the objectives in the Virginia State Plan for Vocational Education states that:

By June 30, 1982, each school division shall have implemented competency-based education in approved vocational education programs based on V-TECS and IDECC catalogs, if available, or other competency-based materials as reported in the annual local evaluation of vocational education programs.

The State Plan also has the objective to identify by June 30, 1982, projects to implement competency-based education in occupational programs not included in the current CBE and Articulation projects.

Goals and Objectives:

1. To identify and/or develop a valid list of tasks/competencies for Agricultural Processing and Marketing III, IV, and V.
2. To develop a product titled, Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing (AG-PAM).
3. To evaluate the product developed.

Project Design: The Agricultural Processing and Marketing (AG-PAM) project was designed to fit into the curriculum coordination procedure already established by project PAVE. The same model was adapted and used for the Agricultural Processing and Marketing (AG-PAM) Project. The following procedures were used:

1. Contact local school division vocational administrators where AG-PAM is taught and establish sound communications and a commitment for cooperation.
2. Research existing curriculum development efforts in AG-PAM.
3. Form an Agricultural Processing and Marketing Advisory Committee with representatives from local agricultural processing and marketing businesses.
4. Identify the terminal competencies needed by students at the secondary level of instruction for AG-PAM.
5. Identify the occupational titles for AG-PAM.
6. Sequence competencies into a logical order for instruction.
7. Determine levels of difficulty for competencies.
8. Arrange competencies into logical teaching units and courses.
9. Develop course outlines.
10. Construct performance objectives.
11. Identify developmental competencies.
12. Construct criterion-referenced measures.
13. List appropriate learning activities for each competency.
14. List tools and materials needed to complete the performance objectives.
15. List appropriate reference materials for each performance objective.
16. List appropriate audio-visual materials.
17. Develop a format for a competency recordkeeping system.
18. Develop instructional management system.
19. Prepare a Competency-Based Instructional Resource Guide - Agricultural Processing and Marketing.
20. Evaluate the final product using procedures in evaluation section.

The primary target population for this project included all secondary agriculture students enrolled in Agricultural Processing and Marketing. Certain students enrolled in Agricultural Business will also benefit from placements in agricultural processing and marketing businesses.

The indirect target population for this project included vocational administrators and agriculture teachers who supervise and provide instruction in Agricultural Processing and Marketing.

The following timetable was established for implementation of the project:

Organization - July 1, 1981 - September 30, 1981

Identify and Validate Competency List - October 1, 1981 - June 30, 1982

Prepare Section II of guide - March 1, 1982 - March 31, 1983

Prepare Section III of guide - March 1, 1983 - April 30, 1983

Prepare Sections IV, V, VI of guide - September 1, 1981 - June 30, 1983

The curriculum (performance objectives, enabling objectives, criterion-referenced measures, instructional activities, tools and equipment, references and audio-visu-als) were developed using a new model called performance contracting. The project contracted with an agricultural education graduate student to write the curriculum.

Accomplishments:

Procedure #1 -

A school division where a course in processing and marketing is taught has been identified, contact was established with the teacher, and an agreement obtained for service on the advisory committee. Also, local schools which place students in agricultural processing and marketing businesses were identified, the teachers contacted, and agreements obtained for service on the advisory committee.

Procedure #2 -

Existing curriculum development efforts were used to develop a tentative job task inventory. A COMSEARCH and MEMS search (conducted by the Marine Education Center - Gloucester Point) were conducted and some of the materials available used in the research for establishing the tentative job list.

Procedure #3 -

An Agricultural Processing and Marketing Advisory Committee was formed with representatives from local agricultural processing and marketing businesses and from local school divisions. In addition, the Advisory Committee had representatives from state AG-PAM businesses and from another school division, in order to accurately represent AG-PAM businesses throughout Virginia. Appendix A contains a list of the Advisory Committee members. The first organizational meeting was held June 24, 1982. (See Appendix B for a copy of the agenda of this dinner/meeting.) Suggestions, comments, and recommendations made by committee members are summarized in Appendix C.

The second Advisory Committee meeting was held on April 29, 1983 (Appendix D). Each section of the resource guide was reviewed and suggestions for improvement were made. Several changes in technical terminology were made as a result of this meeting, and one duty area was eliminated.

Procedure #4 -

A tentative competency list was developed and given to Advisory Committee members for evaluation; in addition, lists were sent to suggested people from industry and education for evaluation (people were suggested by each Advisory Committee member). A copy of this group of people is in Appendix D.

Industry representatives evaluated the task list using criteria based on occupational needs, while educational representatives evaluated the list using criteria related to classroom instruction. See Appendix E for a copy of the task list and evaluation criteria given to industry representatives; Appendix G for a copy of the task list and evaluation criteria used by the committee members in education. (These same tasks lists and evaluation criteria were mailed to other people in industry and education.)

Procedure #5 -

Occupational titles for AG-PAM have been identified and sent to Arlington for development into an occupational information section; these titles are listed in Appendix H. Arlington was no longer prepared to construct the occupational information section of the guide as indicated in the proposal. This section was developed by the project staff.

Procedure #6 -

A task/competency sequence chart was developed which lists the tasks in sequence for each grade level.

Procedure #7 -

Members of the Advisory Committee representing education evaluated the competency list according to level of difficulty. These evaluations were analyzed by computer to determine appropriate levels. See Appendix G for a copy of the task list and evaluation criteria used by the committee members in education and by other educational representatives.

Procedures #8 and #9 -

The tasks were further organized into course outlines which list the enabling objectives associated with each task.

Procedure #10 -

Performance objectives were written for each terminal competency which received a rating of 1.3 or lower on importance.

Procedure #11 -

Enabling objectives (developmental competencies) were written for each terminal competency.

Procedure #12 -

Criteria referenced measures were written for each terminal competency.

Procedure #13 -

Suggested learning activities were written for each terminal competency.

Procedure #14 -

Tools and materials needed to complete each performance objective were listed.

Procedure #15 -

Reference materials were collected from many different sources to develop a listing of resources available to teachers. Instructional materials in the area of Agricultural Processing and Marketing are somewhat limited.

Procedure #16 -

Audio-visual materials were identified and listed. Few audio-visual materials are available in Agricultural Processing and Marketing.

Procedure #17 -

A competency-based recordkeeping form was developed.

Procedure #18 -

A model instructional management system was developed.

Procedure #19 -

The name of the instructional guide has been changed from Agricultural Marketing and Processing to Agricultural Processing and Marketing, in order to recognize the logical sequence involved in taking raw materials, processing them, and then marketing the processed product. In addition, definitions are included to properly identify what is meant by the terms "processing" and "marketing."

Procedure #20 -

The validation team and project consultants were asked to review the products periodically as they were developed.

Evaluation: The project consultant was responsible to evaluate the product for the Virginia Department of Education. His schedule did not allow him to attend all project meetings. An attempt was made to follow the recommendations of the validation team and project consultant.

Conclusions; Implications and Recommendations: It was concluded that there is only one Agricultural Processing and Marketing program in Virginia. Other programs, such as Agricultural Business, place some students in processing or marketing training stations. Input from the validation team indicated that basic knowledge in reading, science, math, animal science, plant science and employability skills were the most important content areas to be taught.

It was further concluded that industrial representatives are supportive of agricultural programs and willing to commit their time and efforts to assist curriculum projects. Scheduling meetings for these busy persons is difficult, however.

It is recommended that other school divisions give consideration to establishing Agricultural Processing and Marketing programs. Technical knowledge and skills should be taught using the cooperative method of training.

APPENDIX A

**AG-PAM
ADVISORY COMMITTEE MEMBERS**

Dairy

Carl Wassum
Plant Manager
Shenandoah's Pride Dairy
41 W Washington Street
Harrisonburg, VA 22801
ph. (703) 434-7328

Fruits and Vegetables

Edward J. Keenan
Corporate Personnel
Safety Director
National Fruit and Product
Company, Inc.
P.O. Box 2040
Winchester, VA 22601
ph. (703) 672-3401

Grain

Thomas R. Yates
Assistant Director
Division of Marketing
P.O. Box 1163
Richmond, VA 23209
ph. (804) 786-3944

Meats

Robert Kelly
Professor
Food Science and Technology
VPI & SU
Blacksburg, VA 24061
ph. (703) 961-6876

Poultry and Eggs

Ben Getz
Public Relations and
Sales Representative
Rockingham Poultry
Broadway, VA 22815
ph. (703) 896-7001

Seafood

Tom Rippen
Food Technologist
Seafood Processing Research and
Extension Unit
P.O. Box 369
Hampton, VA 23669
ph. (804) 564-3122

Tobacco

Carson Tucker
Manager of Management/
Development Division
Philip Morris
P.O. Box 26603
Richmond, VA 23261
ph. (804) 274-3404

**Agricultural Education
Teachers**

R. Z. Arey
Turner Ashby High School
375 Bowman
Dayton, VA 22821
ph. (703) 879-2511

Linda Burgess
Axton Elementary School
Rt. 1
Axton, VA 24054
ph. (703) 650-3838

Dennis Smith
Broadway High School
Broadway, VA 22815
ph. (703) 896-7081

Educational Consultant

O. Beverley Roller
Supervisor-
Agricultural Education
Box 207
Bridgewater, VA 22812
ph. (703) 828-3977

APPENDIX B

AG PAM PROGRAM ADVISORY COMMITTEE

Belle Meade Restaurant
US Rt 11
Harrisonburg, Virginia
June 24, 1982

Presiding: Charles W. Curry
Project Director

Introductions

Invocation

Dinner

Introduction to
Agricultural Processing and Marketing
Curriculum Project

Development of
Agricultural Processing and Marketing
Competency List

Discussion

Administrative Details

Adjournment

menu

tossed garden salad
Junior cut 8oz. strip steak
green beans w/ almonds
baked potato
dinner roll w/ butter
apple pie w/ ice cream
coffee, tea

James Madison University

Department of Distributive and Industrial Education
AG-PAM PROJECT

APPENDIX C

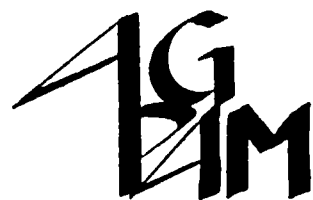
SUGGESTIONS, COMMENTS, AND RECOMMENDATIONS

AG-PAM Advisory Committee

June 24, 1982

- Include a listing which would indicate the location of each industry within the state or would list industries by geographical areas within the state
- Indicate that some type of chemistry/biology background is desirable (knowledge of bacteria counting needed for lab technician type job)
- Include basic competence in understanding how equipment works (more than operating or basic maintenance; understanding of blueprints)
- Cross reference mechanics tasks to agricultural mechanics instructional resource guide
- Include tasks in communications skills
- Training is not necessary in the actual processing but rather background knowledge; employability skills and human relations skills (background knowledge includes cuts of meat, products, sanitation, and quality control)
- Include tasks on check writing
- Include tasks on micro processor operation
- Create a separate marketing section which is general
- Include a section on infectious diseases

APPENDIX D



Program

Advisory Committee

Belle Meade Restaurant 115 Rt 11 Harrisonburg Virginia April 29 1983
Presiding: Charles W. Givry Project Director

Introductions

Invocation

Dinner

Update of Agricultural Processing and Marketing Curriculum Project

Review of Tash List

Discussion

Administrative Details

Adjournment

Menu

fossed garden salad chicken cordon bleu baked potato broccoli
dinner roll w/ butter sherbet coffee, tea

Dairy

Carl Wassum
Plant Manager
Shenandoah's Pride Dairy
41 W Washington Street
Harrisonburg, VA 22801
ph. (703) 434-7328

Fruits and Vegetables

Edward J. Keenan
Corporate Personnel
Safety Director
National Fruit and Product
Company, Inc.
P.O. Box 2040
Winchester, VA 22601
ph. (703) 662-3401

Grain

Thomas R. Yates
Assistant Director
Division of Marketing
P.O. Box 1163
Richmond, VA 23209
ph. (804) 786-3944

Meats

Robert Kelly
Professor
Food Science and Technology
VPI & SU
Blacksburg, VA 24061
ph. (703) 961-6876

Poultry and Eggs

Ben Getz
Public Relations and
Sales Representative
Rockingham Poultry
Broadway, VA 22815
ph. (703) 896-7001

Seafood

Tom Rippen
Food Technologist
Seafood Processing Research and
Extension Unit
P.O. Box 369
Hampton, VA 23669
ph. (804) 564-3122

Tobacco

Carson Tucker
Manager of Management/
Development Division
Philip Morris
P.O. Box 26603
Richmond, VA 23261
ph. (804) 274-3404

**Agricultural Education
Teachers**

R. Z. Arey
Turner Ashby High School
375 Bowman
Dayton, VA 22821
ph. (703) 879-2511

Linda Burgess
Axton Elementary School
Rt. 1
Axton, VA 24054
ph. (703) 650-3838

Dennis Smith
Broadway High School
Broadway, VA 22815
ph. (703) 896-7081

Educational Consultant

O. Beverley Roller
Supervisor-
Agricultural Education
Box 207
Bridgewater, VA 22812

AG-PAM PROJECT Department of Distributive and Industrial Education James Madison University

APPENDIX E

EVALUATION COMMITTEE
RECOMMENDED BY AG-PAM ADVISORY COMMITTEE

1. Mr. John Huffman
Plant Manager
Rockingham Poultry Coop
Broadway, Virginia 22815
2. Mr. Royce Hammer
USDA Grader
Shen-Dutch Foods, Inc.
Dayton, Virginia 22821
3. Dr. Cooler
Dept. of Food Science and Technology
VPI & SU
Blacksburg, Virginia 24061
4. Mr. Tony Dillow
D.E. Instructor
Laurel Park High School
Route 8
Box 165
Martinsville, Virginia 24112
5. Mr. Charles B. Wood
Associate Professor
Dept. of Food Science and Technology
VPI & SU
Blacksburg, Virginia 24061
6. Dr. Dick L. Boyd
Marvel Poultry
Dayton, Virginia 22321
7. Mr. Harvey H. Scott
General Manager
Valley of Virginia Milk Producers Assoc.
41 W. Washington Street
Harrisonburg, Virginia 22801
8. Dr. W. F. Collins
Dept. of Food Science and Technology
VPI & SU
Blacksburg, Virginia 24061
9. Mr. Adolph Ackerman
General Manager
Shen-Valley Meat Packers
Timberville, Virginia 22853
10. Mr. Jim McNeil
Marvel of Virginia
Dayton, Virginia 22821
11. Mr. Frank Blankenmeyer
General Manager
Valleydale Packers, Inc.
Salem, Virginia 24153
12. Mr. James C. Zombro
National Fruit and
Product Co., Inc.
P.O. Box 2040
Winchester, Virginia
22601
13. Mr. Donald Smallwood
Plant Manager
National Fruit and
Product Co., Inc.
P.O. Box 916
Lincolnton, North Carolina
28092
14. Mr. Verlis Miller
Production Manager
National Fruit and
Product Co., Inc.
Winchester, Virginia
22601
15. Dr. Donn Ward
Specialist, Food Technology
Seafood Processing Research
and Extension Unit
P.O. Box 369
Hampton, Virginia 23669
16. Mr. Granston Morgan
W. F. Morgan and Sons, Inc.
Weems, Virginia 22576
17. Mr. Jack Miles
J. H. Miles and Co., Inc.
P.O. Box 178
Southampton Ave.
Norfolk, Virginia 23501
18. Mr. William P. Barlow
Vocational-Education
Coordinator--
Adult Education
Isle of Wight County
Virginia 23397

19. Mr. Bert Kite
Blue Ridge Community College
Weyers Cave, Virginia 24486
20. Mr. C. R. Payne
Manager of Technical Training
Philip Morris
Box 26603
Richmond, Virginia 23261
21. Mr. M. J. Rideout
E.W.I.
Philip Morris, USA
Box 26603
Richmond, Virginia 23261
22. Mr. Randy Griffin
Liggett & Meyers Tobacco Co.
Production Supervisor
Durham, North Carolina 27702
23. Mr. John Huffman
Plant Manager
Rockingham Poultry Market Coop, Inc.
Broadway, Virginia 22815
24. Mr. ~~W. Hobart~~ Harvey
~~Holly Farms, Inc.~~
Harrisonburg, Virginia ~~24401~~

APPENDIX F

CONTENT/CONCEPT AREAS

1. Choosing and entering a career in agricultural processing and marketing
2. Developing human relations skills for a career in agricultural processing and marketing
3. Managing an agricultural processing and marketing business
4. Advertising and promoting an agricultural processed product
5. Applying legal aspects of agricultural processing and marketing
6. Processing and marketing of meats and poultry
7. Processing and marketing of seafood
8. Processing and marketing of fruits and vegetables, including peanuts
9. Processing and marketing of milk and milk products
10. Processing and marketing of shell eggs
11. Insuring quality control in field crop processing (corn, grain, soybeans)
12. Processing and marketing of tobacco
13. Applying general knowledge of agricultural processing and marketing

Please evaluate the following tasks using the criteria and numbers listed below

CHOOSING AND ENTERING A CAREER IN
AGRICULTURAL PROCESSING AND MARKETING

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
1.1 Describe the nature and scope of the agricultural processing and marketing industry				
1.2 Determine the relationship of the processing and marketing industry to the producer, consumer, total economy, and foreign trade				
1.3 Outline employment trends and opportunities				
1.4 Identify broad occupational areas and several specific jobs available within each area				
1.5 Identify educational or training requirements needed for employment in a specific job				
1.6 Compare wage rates with those of other businesses				
1.7 Identify personal long-range and short-term goals				
1.8 Select a tentative occupation				
1.9 Write a letter of application				
1.10 Complete a job application				
1.11 Construct a personal data sheet or resume				
1.12 Participate in a personal interview				
1.13 Write a follow-up letter of appreciation				
1.14 Complete a placement agreement				
1.15				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

33

Tasks	Importance	Frequency	Entry Job	Advancement
2.1 Identify human relations skills required for entry into an agricultural processing and marketing job				
2.2 Recognize physical requirements needed in various aspects of the processing industry				
2.3 Demonstrate ability to follow instructions of supervisors				
2.4 Demonstrate willingness to work				
2.5 Conduct self-evaluation				
2.6 Demonstrate ability to communicate orally and in writing with employer, fellow employees, supervisor, and customers				
2.7 Identify the basic human needs which play a part in worker motivation				
2.8 Make a decision, using the decision-making process				
2.9 Define and recognize the importance of etiquette				
2.10 Maintain effective relations with fellow employees, employer, and supervisor				
2.11 Maintain effective supervisory relations with employees				
2.12 List positive work attitudes				
2.13 Describe a typical agricultural processing work situation				
2.14				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below ..

MANAGING AN AGRICULTURAL PROCESSING AND MARKETING BUSINESS

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

34

Tasks	Importance	Frequency	Entry Job	Advancement
3.1 Determine the proper organization of a business				
3.2 Perform general office duties				
a. Inventory processed products and supplies				
b. Order merchandise sold in salesroom				
c. Record information				
d. Fill out shipping forms				
e. Keep employment records				
f. Prepare requisitions				
g. Keep accurate records for an ag pam business				
h. Write business letters				
i. Illustrate importance of keeping an organized filing system				
j. Keep an organized filing system				
k. Interpret a financial statement				
l. Apply principles of double-entry bookkeeping				
m. Maintain field inspection reports				
n. Demonstrate ability to adjust to changes in general work routine				
3.3 Develop a financial plan for an agricultural processing and marketing business				
a. Prepare a complete income and expense budget				

31

32

Please add any tasks that you wish if you feel something is missing or not adequately covered.

- Please evaluate the following tasks using the criteria and numbers listed
- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
b. List the various methods of payment for work (hourly, piece, salary)				
c. List several (monetary) fringe benefits in addition to normal wages or salaries				
d. Explain how the credit policies of a company affect its business				
e. Handle money				
f. Account for money in cash registers and obtain additional change as needed				
g. Borrow money				
h. Identify facility needs for an ag pam business				
i. Determine insurance needs				
j. List real estate tax regulations				
k. Establish retail prices for ag processed products				
l. Analyze a business and rate financial soundness				
m. Use hedging techniques to protect business profits				
n. List taxation laws of a) individual ownership of a business b) partnership c) business corporation				
3.4 Perform appropriate salesroom duties				
a. Supervise sale of products retailed through processing				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
plants salesroom				
b. Check equipment in salesroom and report malfunctions and service requirements to the maintenance engineer or plant superintendent				
c. Supervise cleaning of salesroom and equipment				
d. Supervise packaging, storage, and display of processed products				
e. Assist with serving of retail customers				
f. Contact customers and make sales				
g. Demonstrate skills necessary for sales				
h. Write out a sales ticket or receipt				
3.5 Demonstrate supervisory skills				
a. Determine personnel requirements				
b. Interview and select employees				
c. Train new personnel				
d. Supervise and schedule workers for the operation of the salesroom				
e. Evaluate employees performance				
f. Formulate daily objectives for organization and distribution of manpower, equipment, facilities, and goods				
g. Lay out a weekly schedule of activities for an employee				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
h. Maintain working conditions under existing contract agreements				
i. Enforce employee safety regulations and standards				
j. Instruct and direct work of employees in the production, packaging, and storing of processed products				
3.6 Receive and follow daily markets for a particular commodity				
3.7 Describe features and imitations of processed products				
a. Describe uses of processed products				
b. Describe and analyze markets available for products				
3.8 Select shipping method for various processed products				
a. Explain advantages and disadvantages of different types of freight using freight rates and schedules				
b. Determine most economical and efficient means of transportation				
c. Inspect car or truck to determine acceptability				
d. Recognize problems associated with transporting a) perishables b) semi-processed goods c) processed goods				
e. Interpret shipping and postal rates and instructions				
f. Prepare and load rail cars and trucks				
g. Adjust cooling or freezing equipment (adjust temp. controls) to proper settings when necessary				

37

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

MANAGING AN AGRICULTURAL PROCESSING AND MARKETING BUSINESS

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
h. Interpret freight rates for transportation of product				
i. Prepare a bill of lading				
3.9 Develop a plan to organize a cooperative				
a. Develop a plan for financing cooperative				
b. List the various taxation laws of a cooperative				
3.10				

38

33

40

Please add any tasks that you wish if you feel something is missing or not adequately covered.



- A Importance of competency 1 very 2 somewhat 3 not
- B Frequency of competency 1 very 2 average 3 not
- C Is this skill necessary for entry-level employment? 1 yes 2 do not know 3 no
- D Is this skill necessary for advancement? 1 yes 2 do not know 3 no

39	Tasks	Importance	Frequency	Entry Job	Advancement
	4.1 Demonstrate ability to project desirable image for the firm				
	4.2 Develop an advertising campaign using various media				
	4.3 Prepare an advertising calendar				
	4.4 Develop an advertising budget				
	4.5 Analyze advertising needs of the business				
	4.6 Explain major concepts used in advertising and promoting a product				
	4.7 List business promotion activities				
	4.8 Plan and construct a basic display for a specific product				
	4.9 Identify manufacturer's and wholesaler's promotional programs				
	4.10 Identify and explain federal regulations pertaining to advertising of processed products				
	4.11				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
5.1 Explain the role of unions in an agricultural processing and marketing business				
5.2 List and explain the five major areas in the Fair Labor Standards Act				
5.3 Explain the U.S. Food, Drug, and Cosmetic Act as it relates to processing food products				
5.4 Describe standards for packaging and labeling food products				
5.5 List and describe other major federal regulations which apply to commercial processing and handling of food products				
5.6 List and describe major federal regulations which apply to the tobacco industry				
5.7 Interpret government regulations of warehousing				
5.8 Explain specific federal and state obligations which an employer has to an employee				
5.9 List employee incentives and fringe benefits				
5.10				

40

43

44

Please add any tasks that you wish if you feel something is missing or not adequately covered.

- Please evaluate the following tasks using the criteria as indicated.
- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
6.1 Identify proper methods and procedures for handling animals/poultry prior to slaughter				
6.2 Perform antemortem inspection conforming to USDA regulations				
6.3 Grade slaughter cattle, calves, lambs, hogs, and poultry				
6.4 Select/maintain equipment and supplies necessary for slaughter				
6.5 Demonstrate proper use of equipment in slaughtering process				
6.6 List safety practices that pertain to use of equipment				
6.7 Describe slaughtering process for cattle, calves, lambs, hogs, poultry according to USDA regulations				
6.8 Perform postmortem inspection of beef, veal, lamb, swine, and poultry carcasses conforming to USDA regulations				
6.9 Describe procedure to dress carcass for cattle, calves, lambs, hogs, and poultry				
6.10 Explain procedure to process carcass of cattle, calves, lambs, hogs, and poultry into retail cuts according to USDA regulations				
6.11 Inspect and grade beef, veal, lamb, mutton, pork, and poultry carcasses according to USDA regulations				
6.12 Identify various by-products of slaughtering processes and their uses				
6.13 Explain secondary processing procedure for ground and ready-to-				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
serve meats, bacon, hams, sausages, etc.				
6.14 Describe various methods of meat and poultry preservation				
6.15 Package and label meat and poultry according to USDA regulations				
6.16 Receive meat and poultry shipments				
a. Display and sell meats and poultry				
b. Inventory meats and poultry				
c. Purchase meats and poultry supplies				
d. Determine proper storage techniques				
6.17 Describe procedures to sanitize meat slaughter and poultry slaughter facilities according to USDA regulations (Sanitation Handbook)				
6.18 Complete a sanitation report in triplicate in accordance with the Sanitation Handbook of the USDA				
6.19 Describe the procedure to slaughter and process cattle and lambs according to Jewish law				
6.20 Define terms used in the processing and marketing of meat and poultry				
6.21				

17

18

Please add any tasks that you wish if you feel something is missing or not adequately covered.

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

	Tasks	Importance	Frequency	Entry Job	Advancement
43	7.1 Identify various types of fin fish and shell fish common to Virginia				
	7.2 Receive seafood shipment				
	a. Display and sell seafood				
	b. Inventory seafood				
	c. Purchase seafood supplies				
	d. Determine proper storage techniques				
	7.3 Identify various types of fish cuts				
	7.4 Describe procedure to prepare fish for processing into retail cuts				
	7.5 Identify by-products of fish processing and their uses				
	7.6 Package and label fish according to U.S. Department of Commerce (USDC) regulations				
	7.7 Describe various methods of fish preservation				
	7.8 Describe procedure to sanitize facilities, according to federal, state, and local regulations				
7.9 Inspect and grade fish according to USDC regulations					
7.10 Describe USDC regulations pertaining to the processing of seafood					
7.11 Describe the various fishery inspections available to a processing plant					
7.12 Define terms used in the processing and marketing of seafood					

Please add any tasks that you wish if you feel something is missing or not adequately covered.

- Please evaluate the following tasks using the criteria and numbers listed below
- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

45

Tasks	Importance	Frequency	Entry Job	Advancement
8.1 Identify equipment and parts for a small cannery operation				
8.2 Receive and grade raw materials according to FDA or USDA regulations				
8.3 List steps of general canning procedure				
8.4 Process products according to Federal regulations				
8.5 Perform sealer test using USDA standards for seals				
8.6 Receive and store processed products in accordance with FDA regulations				
8.7 Sanitize each piece of equipment and the facility following FDA regulations				
8.8 Evaluate product for quality control according to FDA or USDA and company standards				
8.9 Identify causes and methods of prevention of spoilage of canned food products				
8.10 Explain the purpose and function of food additives				
8.11 Explain importance of water in canning operation				
8.12 Describe processing procedure/time for low-acid, acid, and high-acid foods				
8.13 Explain the importance of adequate heat treatment for low-acid canned foods in the destruction of botulism				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

PROCESSING AND MARKETING OF MILK
AND MILK PRODUCTS

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

47

Tasks	Importance	Frequency	Entry Job	Advancement
9.1 Determine a milk collection route				
9.2 Describe procedure necessary to prepare milk for processing following the regulations in the Milk Ordinance and Code of the U.S. Public Health Service				
9.3 Operate milk processing equipment following federal regulations				
9.4 Standardize milk following federal regulations				
9.5 Prepare daily records and milk samples				
9.6 Calculate the amounts of ingredients needed to make various milk products following federal regulations				
9.7 Operate manufacturing equipment for selected milk products following federal regulations				
9.8 Package, label, and store manufactured fluid milk and milk products following federal regulations				
9.9 Receive fluid milk and milk products shipments				
9.10 Describe procedure for sanitizing and cleaning equipment according to federal regulations				
9.11 Evaluate product for quality control according to federal and company regulations				
9.12 Explain the purpose and functions of the Milk Marketing Board				
9.13 Identify and explain the grades and classes of milk according				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below.

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
10.1 Describe egg collection methods				
10.2 List factors that influence egg production				
10.3 Determine grade of egg according to USDA standards				
10.4 Determine size classification of egg				
10.5 Operate egg washing equipment following USDA regulations				
10.6 Explain purpose of oiling egg				
10.7 Select appropriate packaging materials following USDA regulations				
10.8 Receive egg shipments				
10.9 Determine proper storage temperature following USDA regulations				
10.10 Sanitize facilities				
10.11 Define terms used in the processing and marketing of shell eggs				
10.12				

49

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
average | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

Tasks	Importance	Frequency	Entry Job	Advancement
11.1 Identify major field crops grown and processed in Virginia				
11.2 Evaluate quality of field crop				
11.3 Classify and grade field crop following standards established in the Grain Standards Act				
11.4 Describe processing procedure for field crops following USDA regulations				
11.5 List appropriate USDA regulations for each field crop processing plant				
11.6 Inspect processed product according to USDA regulations				
11.7 Sanitize processing facilities following USDA standards				
11.8 Define terms used in insuring quality control for field crop processing				
11.9				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | |
|----|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B. | Frequency of competency | 1
very | 2
somewhat | 3
not |
| C. | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D. | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

12.1	Identify major products of tobacco processing				
12.2	List the main types of tobacco used in processing and the major states providing each type				
12.3	Describe the procedure to prepare tobacco for processing				
12.4	List primary steps involved in processing tobacco into cigarettes				
12.5	Describe quality controls for each step of the tobacco processing procedure				
12.6	Explain the operation and general maintenance procedure for equipment used in tobacco processing				
12.7	Explain the Food and Drug Administration guidelines to sanitize the facility				
12.8	Describe federal regulations pertaining to the packaging and storing of tobacco products				
12.9	Receive tobacco products shipments				
12.10	List federal, state, and local taxing regulations for tobacco products				
12.11	Define terms used in the processing and marketing of tobacco				
12.12					

- | | | | | |
|---|---|-----------|------------------|----------|
| A | Importance of competency | 1
very | 2
somewhat | 3
not |
| B | Frequency of competency | 1
very | 2
somewhat | 3
not |
| C | Is this skill necessary for entry-level employment? | 1
yes | 2
do not know | 3
no |
| D | Is this skill necessary for advancement? | 1
yes | 2
do not know | 3
no |

53

13.1	Practice safety in all activities, especially during operation of processing equipment				
13.2	Demonstrate first aid skills				
13.3	Maintain equipment for safe and healthful operation according to USDA standards				
13.4	Explain the necessity for cleanliness and regular plant inspections				
13.5	Use and care for storage equipment				
13.6	Operate loading and unloading equipment				
13.7	Define terms commonly used in agricultural processing and marketing				
13.8					



Please evaluate the following content area and tasks using the criteria and numbers list below.

- A Importance of this content area/Importance of this competency 1 very 2 somewhat 3 not
- B Does this competency adequately reflect a future trend in agricultural processing and marketing? 1 yes 2 do not know 3 no

Tasks	Importance Reflection			
1. List future trends for processing Virginia agricultural products				
2. Describe processing procedure for grapes into wines				
3. Describe processing procedure for grains into alcohol fuels				
4. Explain importance of these processing areas to the future of Virginia agriculture, the state economy, and the national economy				

54

53

54

Please add any tasks that you wish if you feel something is missing or not adequately covered.



APPENDIX G

CONTENT/CONCEPT AREAS

1. Choosing and entering a career in agricultural processing and marketing
2. Developing human relations skills for a career in agricultural processing and marketing
3. Managing an agricultural processing and marketing business
4. Advertising and promoting an agricultural processed product
5. Applying legal aspects of agricultural processing and marketing
6. Processing and marketing of meats and poultry
7. Processing and marketing of seafood
8. Processing and marketing of fruits and vegetables, including peanuts
9. Processing and marketing of milk and milk products
10. Processing and marketing of shell eggs
11. Insuring quality control in field crop processing (corn, grain, soybeans)
12. Processing and marketing of tobacco
13. Applying general knowledge of agricultural processing and marketing

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | | |
|---|--|----------------------|----------------|-----------------------|--------------------|
| A | Importance of Competency | 1
very | 2
somewhat | 3
not | |
| B | Level of Difficulty | 1
very | 2
somewhat | 3
not | |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school facility | 2
undecided | 3
on-the-job skill | |
| D | At what level would you teach this competency? | 1
sophmore | 2
junior | 3
senior | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
1.1 Describe the nature and scope of the agricultural processing and marketing industry				
1.2 Determine the relationship of the processing and marketing industry to the producer, consumer, total economy, and foreign trade				
1.3 Outline employment trends and opportunities				
1.4 Identify broad occupational areas and several specific jobs available within each area				
1.5 Identify educational or training requirements needed for employment in a specific job				
1.6 Compare wage rates with those of other businesses				
1.7 Identify personal long-range and short-term goals				
1.8 Select a tentative occupation				
1.9 Write a letter of application				
1.10 Complete a job application				
1.11 Construct a personal data sheet or resume				
1.12 Participate in a personal interview				
1.13 Write a follow-up letter of appreciation				
1.14 Complete a placement agreement				
1.15				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Developing human relations skills
for a career in agricultural
processing and marketing

- | | | | | | |
|---|--|----------------------|----------------|-----------------------|--------------------|
| A | Importance of Competency | 1
very | 2
somewhat | 3
not | |
| B | Level of Difficulty | 1
very | 2
somewhat | 3
not | |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school facility | 2
undecided | 3
on-the-job skill | |
| D | At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior | 4
postsecondary |

69

Tasks	Importance	Difficulty	Site	Level
2.1 Identify human relations skills required for entry into an agricultural processing and marketing job				
2.2 Recognize physical requirements needed in various aspects of the processing industry				
2.3 Demonstrate ability to follow instructions of supervisors				
2.4 Demonstrate willingness to work				
2.5 Conduct self-evaluation				
2.6 Demonstrate ability to communicate orally and in writing with employer, fellow employees, supervisor, and customers				
2.7 Identify the basic human needs which play a part in worker motivation				
2.8 Make a decision, using the decision-making process				
2.9 Define and recognize the importance of etiquette				
2.10 Maintain effective relations with fellow employees, employer, and supervisor				
2.11 Maintain effective supervisory relations with employees				
2.12 List positive work attitudes				
2.13 Describe a typical agricultural processing work situation				
2.14				

63

70

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

agricultural and marketing business
 cultural processing and marketing business

- | | | | | |
|---|--|------------------------------|------------------------|-------------------------------|
| A | Importance of Competency | very ¹ | somewhat ² | not ³ |
| B | Level of Difficulty | very ¹ | somewhat ² | not ³ |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | school ¹ facility | undecided ² | on-the-job ³ skill |
| D | At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior |
| | | | | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
b. List the various methods of payment for work (hourly, piece, salary)				
c. List several (monetary) fringe benefits in addition to normal wages or salaries				
d. Explain how the credit policies of a company affect its business				
e. Handle money				
f. Account for money in cash registers and obtain additional change as needed				
g. Borrow money				
h. Identify facility needs for an ag pam business				
i. Determine insurance needs				
j. List real estate tax regulations				
k. Establish retail prices for ag processed products				
l. Analyze a business and rate financial soundness				
m. Use hedging techniques to protect business profits				
n. List taxation laws of a) individual ownership of a business b) partnership c) business corporation				
3.4 Perform appropriate salesroom duties				
a. Supervise sale of products retailed through processing				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Managing an agricultural processing and marketing business

- | | | | | |
|---|--|----------------------|----------------|-----------------------|
| A | Importance of Competency | 1
very | 2
somewhat | 3
not |
| B | Level of Difficulty | 1
very | 2
somewhat | 3
not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school facility | 2
undecided | 3
on-the-job skill |
| D | At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior |
| | | | | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
3.1 Determine the proper organization of a business				
3.2 Perform general office duties				
a. Inventory processed products and supplies				
b. Order merchandise sold in salesroom				
c. Record information				
d. Fill out shipping forms				
e. Keep employment records				
f. Prepare requisitions				
g. Keep accurate records for an ag pam business				
h. Write business letters				
i. Illustrate importance of keeping an organized filing system				
j. Keep an organized filing system				
k. Interpret a financial statement				
l. Apply principles of double-entry bookkeeping				
m. Maintain field inspection reports				
n. Demonstrate ability to adjust to changes in general work routine				
3.3 Develop a financial plan for an agricultural processing and marketing business				
a. Prepare a complete income and expense budget				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Managing an agricultural processing and marketing business

- | | | | | |
|---|--|-------------------------|----------------|--------------------------|
| A | Importance of Competency | 1
very | 2
somewhat | 3
not |
| B | Level of Difficulty | 1
very | 2
somewhat | 3
not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school
facility | 2
undecided | 3
on-the-job
skill |
| D | At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior |
| | | | | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
plants salesroom				
b. Check equipment in salesroom and report malfunctions and service requirements to the maintenance engineer or plant superintendent				
c. Supervise cleaning of salesroom and equipment				
d. Supervise packaging, storage, and display of processed products				
e. Assist with serving of retail customers				
f. Contact customers and make sales				
63 g. Demonstrate skills necessary for sales				
h. Write out a sales ticket or receipt				
3.5 Demonstrate supervisory skills				
a. Determine personnel requirements				
b. Interview and select employees				
c. Train new personnel				
d. Supervise and schedule workers for the operation of the salesroom				
e. Evaluate employees performance				
f. Formulate daily objectives for organization and distribution of manpower, equipment, facilities, and goods				
g. Lay out a weekly schedule of activities for an employee				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

A	Importance of Competency	1 very	2 somewhat	3 not	
B	Level of Difficulty	1 very	2 somewhat	3 not	
C	Would you teach this skill in the school facilities or find a suitable job experience for the student?	1 school facility	2 undecided	3 on-the-job skill	
D	At what level would you teach this competency?	1 sophomore	2 junior	3 senior	4 postsecondary

64

Tasks	Importance	Difficulty	Site	Level
h. Maintain working conditions under existing contract agreements				
i. Enforce employee safety regulations and standards				
j. Instruct and direct work of employees in the production, packaging, and storing of processed products				
3.6 Receive and follow daily markets for a particular commodity				
3.7 Describe features and limitations of processed products				
a. Describe uses of processed products				
b. Describe and analyze markets available for products				
3.8 Select shipping method for various processed products				
a. Explain advantages and disadvantages of different types of freight using freight rates and schedules				
b. Determine most economical and efficient means of transportation				
c. Inspect car or truck to determine acceptability				
d. Recognize problems associated with transporting a) perishables b) semi-processed goods c) processed goods				
e. Interpret shipping and postal rates and instructions				
f. Prepare and load rail cars and trucks				
g. Adjust cooling or freezing equipment (adjust temp. controls) to proper settings when necessary				

77

78

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | |
|---|--|----------------------|----------------|-----------------------|
| A | Importance of Competency | 1
very | 2
somewhat | 3
not |
| B | Level of Difficulty | 1
very | 2
somewhat | 3
not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school facility | 2
undecided | 3
on-the-job skill |
| D | At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior |
| | | | | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
h. Interpret freight rates for transportation of product				
i. Prepare a bill of lading				
3.9 Develop a plan to organize a cooperative				
a. Develop a plan for financing cooperative				
b. List the various taxation laws of a cooperative				
3.10				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | | |
|---|--|----------------------|----------------|-----------------------|--------------------|
| A | Importance of Competency | 1
very | 2
somewhat | 3
not | |
| B | Level of Difficulty | 1
very | 2
somewhat | 3
not | |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school facility | 2
undecided | 3
on-the-job skill | |
| D | At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
4.1 Demonstrate ability to project desirable image for the firm				
4.2 Develop an advertising campaign using various media				
4.3 Prepare an advertising calendar				
4.4 Develop an advertising budget				
4.5 Analyze advertising needs of the business				
4.6 Explain major concepts used in advertising and promoting a product				
4.7 List business promotion activities				
4.8 Plan and construct a basic display for a specific product				
4.9 Identify manufacturer's and wholesaler's promotional programs				
4.10 Identify and explain federal regulations pertaining to advertising of processed products				
4.11				

Please add any tasks that you wish if you feel something is missing or not adequately covered.



Please evaluate the following tasks using the criteria and numbers listed below

- A Importance of Competency very¹ somewhat² not³
- B Level of Difficulty very¹ somewhat² r³
- C Would you teach this skill in the school facilities or find a suitable job experience for the student?
 school facility undecided² on-the-job skill³
- D At what level would you teach this competency?
 1 2 3 4
 sophomore junior senior postsecondary

107

Tasks	Importance	Difficulty	Site	Level
5.1 Explain the role of unions in an agricultural processing and marketing business				
5.2 List and explain the five major areas in the Fair Labor Standards Act				
5.3 Explain the U.S. Food, Drug, and Cosmetic Act as it relates to processing food products				
5.4 Describe standards for packaging and labeling food products				
5.5 List and describe other major federal regulations which apply to commercial processing and handling of food products				
5.6 List and describe major federal regulations which apply to the tobacco industry				
5.7 Interpret government regulations of warehousing				
5.8 Explain specific federal and state obligations which an employer has to an employee				
5.9 List employee incentives and fringe benefits				
5.10				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- | | | | | |
|--|----------------------|----------------|-----------------------|--------------------|
| A Importance of Competency | 1
very | 2
somewhat | 3
not | |
| B Level of Difficulty | 1
very | 2
somewhat | 3
not | |
| C Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school facility | 2
undecided | 3
on-the-job skill | |
| D At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
6.1 Identify proper methods and procedures for handling animals/poultry prior to slaughter				
6.2 Perform antemortem inspection conforming to USDA regulations				
6.3 Grade slaughter cattle, calves, lambs, hogs, and poultry				
6.4 Select/maintain equipment and supplies necessary for slaughter				
6.5 Demonstrate proper use of equipment in slaughtering process				
6.6 List safety practices that pertain to use of equipment				
6.7 Describe slaughtering process for cattle, calves, lambs, hogs, poultry according to USDA regulations				
6.8 Perform postmortem inspection of beef, veal, lamb, swine, and poultry carcasses conforming to USDA regulations				
6.9 Describe procedure to dress carcass for cattle, calves, lambs, hogs, and poultry				
6.10 Explain procedure to process carcass of cattle, calves, lambs, hogs, and poultry into retail cuts according to USDA regulations				
6.11 Inspect and grade beef, veal, lamb, mutton, pork, and poultry carcasses according to USDA regulations				
6.12 Identify various by-products of slaughtering processes and their uses				
6.13 Explain secondary processing procedure for ground and ready-to-				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Processing and marketing meats and poultry

- | | | | | | |
|---|--|----------------------|----------------|-----------------------|--------------------|
| A | Importance of Competency | 1
very | 2
somewhat | 3
not | |
| B | Level of Difficulty | 1
very | 2
somewhat | 3
not | |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school facility | 2
undecided | 3
on-the-job skill | |
| D | At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
serve meats, bacon, hams, sausages, etc.				
6.14 Describe various methods of meat and poultry preservation				
6.15 Package and label meat and poultry according to USDA regulations				
6.16 Receive meat and poultry shipments				
a. Display and sell meats and poultry				
b. Inventory meats and poultry				
c. Purchase meats and poultry supplies				
d. Determine proper storage techniques				
6.17 Describe procedures to sanitize meat slaughter and poultry slaughter facilities according to USDA regulations (Sanitation Handbook)				
6.18 Complete a sanitation report in triplicate in accordance with the Sanitation Handbook of the USDA				
6.19 Describe the procedure to slaughter and process cattle and lambs according to Jewish law				
6.20 Define terms used in the processing and marketing of meat and poultry				
6.21				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

Processing and marketing seafood

- | | | | | | |
|---|--|----------------------|----------------|-----------------------|--------------------|
| A | Importance of Competency | 1
very | 2
somewhat | 3
not | |
| B | Level of Difficulty | 1
very | 2
somewhat | 3
not | |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school facility | 2
undecided | 3
on-the-job skill | |
| D | At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
7.1 Identify various types of fin fish and shell fish common to Virginia				
7.2 Receive seafood shipment				
a. Display and sell seafood				
b. Inventory seafood				
c. Purchase seafood supplies				
d. Determine proper storage techniques				
7.3 Identify various types of fish cuts				
7.4 Describe procedure to prepare fish for processing into retail cuts				
7.5 Identify by-products of fish processing and their uses				
7.6 Package and label fish according to U.S. Department of Commerce (USDC) regulations				
7.7 Describe various methods of fish preservation				
7.8 Describe procedure to sanitize facilities, according to federal, state, and local regulations				
7.9 Inspect and grade fish according to USDC regulations				
7.10 Describe USDC regulations pertaining to the processing of seafood				
7.11 Describe the various fishery inspections available to a processing plant				
7.12 Define terms used in the processing and marketing of seafood				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

					Processing and marketing fruits vegetables, including peanuts
A	Importance of Competency	1 very	2 somewhat	3 not	
B	Level of Difficulty	1 very	2 somewhat	3 not	
C	Would you teach this skill in the school facilities or find a suitable job experience for the student?	1 school facility	2 undecided	3 on-the-job skill	
D	At what level would you teach this competency?	1 sophomore	2 junior	3 senior	4 postsecondary

Tasks	Importance	Difficulty	Site	Level
8.1 Identify equipment and parts for a small cannery operation				
8.2 Receive and grade raw materials according to FDA or USDA regulations				
8.3 List steps of general canning procedure				
8.4 Process products according to Federal regulations				
8.5 Perform sealer test using USDA standards for seals				
8.6 Receive and store processed products in accordance with FDA regulations				
8.7 Sanitize each piece of equipment and the facility following FDA regulations				
8.8 Evaluate product for quality control according to FDA or USDA and company standards				
8.9 Identify causes and methods of prevention of spoilage of canned food products				
8.10 Explain the purpose and function of food additives				
8.11 Explain importance of water in canning operation				
8.12 Describe processing procedure/time for low-acid, acid, and high-acid foods				
8.13 Explain the importance of adequate heat treatment for low-acid canned foods in the destruction of botulism				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

- A Importance of Competency ¹very ²somewhat ³not
- B Level of Difficulty ¹very ²somewhat ³not
- C Would you teach this skill in the school facilities or find a suitable job experience for the student? ¹school facility ²undecided ³on-the-job skill
- D At what level would you teach this competency? ¹sophomore ²junior ³senior ⁴postsecondary

Tasks	Importance	Difficulty	Site	Level
8.14 Define terms used in the processing and marketing of fruits and vegetables				
8.15				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Please evaluate the following tasks using the criteria and numbers listed below

A	Importance of Competency	1 very	2 somewhat	3 not	
B	Level of Difficulty	1 very	2 somewhat	3 not	
C	Would you teach this skill in the school facilities or find a suitable job experience for the student?	1 school facility	2 undecided	3 on-the-job skill	
D	At what level would you teach this competency?	1 sophmore	2 junior	3 senior	4 postsecondary

Tasks	Importance	Difficulty	Site	Level
9.1 Determine a milk collection route				
9.2 Describe procedure necessary to prepare milk for processing following the regulations in the Milk Ordinance and Code of the U.S. Public Health Service				
9.3 Operate milk processing equipment following federal regulations				
9.4 Standardize milk following federal regulations				
9.5 Prepare daily records and milk samples				
9.6 Calculate the amounts of ingredients needed to make various milk products following federal regulations				
9.7 Operate manufacturing equipment for selected milk products following federal regulations				
9.8 Package, label, and store manufactured fluid milk and milk products following federal regulations				
9.9 Receive fluid milk and milk products shipments				
9.10 Describe procedure for sanitizing and cleaning equipment according to federal regulations				
9.11 Evaluate product for quality control according to federal and company regulations				
9.12 Explain the purpose and functions of the Milk Marketing Board				
9.13 Identify and explain the grades and classes of milk according				

Please add any tasks that you wish if you feel something is missing or not adequately covered.

Processing and marketing milk
and milk products

Please evaluate the following tasks using the criteria and numbers listed below

A	Importance of Competency	1 very	2 somewhat	3 not
B	Level of Difficulty	1 very	2 somewhat	3 not
C	Would you teach this skill in the school facilities or find a suitable job experience for the student?	1 school facility	2 undecided	3 on-the-job skill
D	At what level would you teach this competency?	1 sophomore	2 junior	3 senior
				4 postsecondary

Tasks	Importance	Difficulty	Site	Level
to federal regulations.				
9.14 Define terms used in the processing and marketing of milk and milk products				
9.15				

74

97

98

Please add any tasks that you wish if you feel something is missing or not adequately covered.



Please evaluate the following tasks using the criteria and numbers listed below

- A Importance of Competency 1 very 2 somewhat 3 not
- B Level of Difficulty 1 very 2 somewhat 3 not
- C Would you teach this skill in the school facilities or find a suitable job experience for the student? 1 school facility 2 undecided 3 on-the-job skill
- D At what level would you teach this competency? 1 sophomore 2 junior 3 senior 4 postsecondary

Tasks	Importance	Difficulty	Site	Level
10.1 Describe egg collection methods				
10.2 List factors that influence egg production				
10.3 Determine grade of egg according to USDA standards				
10.4 Determine size classification of egg				
10.5 Operate egg washing equipment following USDA regulations				
10.6 Explain purpose of oiling egg				
10.7 Select appropriate packaging materials following USDA regulations				
10.8 Receive egg shipments				
10.9 Determine proper storage temperature following USDA regulations				
10.10 Sanitize facilities				
10.11 Define terms used in the processing and marketing of shell eggs				
10.12				

75

Please add any tasks that you wish if you feel something is missing or not adequately covered.



Please evaluate the following tasks using the criteria and numbers listed below

Insuring quality, control in field crop processing (corn, grain, soybeans)

- | | | | | |
|---|--|----------------------|----------------|-----------------------|
| A | Importance of Competency | 1
very | 2
somewhat | 3
not |
| B | Level of Difficulty | 1
very | 2
somewhat | 3
not |
| C | Would you teach this skill in the school facilities or find a suitable job experience for the student? | 1
school facility | 2
undecided | 3
on-the-job skill |
| D | At what level would you teach this competency? | 1
sophomore | 2
junior | 3
senior |
| | | | | 4
postsecondary |

Tasks	Importance	Difficulty	Site	Level
11.1 Identify major field crops grown and processed in Virginia				
11.2 Evaluate quality of field crop				
11.3 Classify and grade field crop following standards established in the Grain Standards Act				
11.4 Describe processing procedure for field crops following USDA regulations				
11.5 List appropriate USDA regulations for each field crop processing plant				
76 11.6 Inspect processed product according to USDA regulations				
11.7 Sanitize processing facilities following USDA standards				
11.8 Define terms used in insuring quality control for field crop processing				
11.9				

101

102

Please add any tasks that you wish if you feel something is missing or not adequately covered.



Please evaluate the following tasks using the criteria and numbers listed below

- A Importance of Competency very¹ somewhat² not³
- B Level of Difficulty very¹ somewhat² not³
- C Would you teach this skill in the school facilities or find a suitable job experience for the student? school facility¹ undecided² on-the-job skill³
- D At what level would you teach this competency?

 1 2 3 4
sophmore junior senior postsecondary

77

Tasks	Importance	Difficulty	Site	Level
12.1 Identify major products of tobacco processing				
12.2 List the main types of tobacco used in processing and the major states providing each type				
12.3 Describe the procedure to prepare tobacco for processing				
12.4 List primary steps involved in processing tobacco into cigarettes				
12.5 Describe quality controls for each step of the tobacco processing procedure				
12.6 Explain the operation and general maintenance procedure for equipment used in tobacco processing				
12.7 Explain the Food and Drug Administration guidelines to sanitize the facility				
12.8 Describe federal regulations pertaining to the packaging and storing of tobacco products				
12.9 Receive tobacco products shipments				
12.10 List federal, state, and local taxing regulations for tobacco products				
12.11 Define terms used in the processing and marketing of tobacco				
12.12				

Please add any tasks that you wish if you feel something is missing or not adequately covered.



APPENDIX H

REPRESENTATIVE
OCCUPATIONS IN AGRICULTURAL PROCESSING AND MARKETING

1. Butcher, retail	316.681-010
2. Carver, retail	316.661-010
3. Butcher, fish	525.684-014
4. Salesclerk, food	290.477-018
5. Fish processing	525.134-010
6. Food and Drug inspector	168.267-042
7. Supervisor, dairy processing	529.131-014
8. Sanitarian	529.137-014
9. Inspector: grain mill products	529.387-026
10. Cannery worker	529.686-014
11. Egg Candler	529.687-074
12. Inspector: agricultural commodities	168.287-010
13. Plant supervisor: tobacco	529.137-026
14. Tobacco grader	400.687.010
15. Shipping and receiving clerk (in any processing facility)	222.387-010
16. Meat Inspector	316.684-018

APPENDIX I

BALANCE SHEET

	Budget Requested from State	Actual Expenditures	Local Contributions
I. <u>Salaries</u>			
Secretary Linda B. Heatwole (120 hrs.@\$6.70/hr.)	\$ 804.00	\$ 804.00	\$ 0.00
Fringe Benefits (6.7%)	<u>53.86</u>	<u>53.86</u>	<u>0.00</u>
SUBTOTAL SALARIES	\$ 857.86	\$ 857.86	\$ 0.00
II. <u>Contractual Services</u>			
A. Curriculum Development	\$ 2,000.00	\$ 2,050.00	\$ 0.00
B. Copying	247.14	118.40	200.00
C. Equipment Rental	900.00	837.48	0.00
D. Meals for Advisory Meetings	<u>100.00</u>	<u>81.33</u>	<u>0.00</u>
SUBTOTAL CONTRACTUAL SERVICES	\$ 3,247.14	\$ 3,087.21	\$ 200.00
III. <u>Materials and Supplies</u>			
A. Office Supplies	\$ 75.00	\$ 76.00	\$ 200.00
B. Postage	<u>0.00</u>	<u>0.00</u>	<u>100.00</u>
SUBTOTAL MATERIALS AND SUPPLIES	\$ 75.00	\$ 76.00	\$ 300.00
IV. <u>Travel</u>			
A. Project Advisory Committee	\$ 125.00	\$ 193.79	\$ 0.00
B. Project Director	50.00	0.00	0.00
C. Project Curriculum Specialist	<u>275.00</u>	<u>244.00</u>	<u>0.00</u>
SUBTOTAL TRAVEL	\$ 450.00	\$ 437.79	\$ 0.00
V. <u>Other Related Expenses</u>	\$ 0.00	\$ 0.00	\$ 0.00
SUBTOTAL OTHER RELATED EXPENSES	\$ 0.00	\$ 0.00	\$ 0.00
VI. <u>Indirect Costs</u>			
8% of \$4,630.00	\$ 370.00	\$ 356.71	\$ 0.00
SUBTOTAL INDIRECT COSTS	\$ 370.00	\$ 356.71	\$ 0.00
<u>TOTAL</u>	<u>\$ 5,000.00</u>	<u>\$ 4,815.57</u>	<u>\$ 500.00</u>