Arrington, Larry

Military Curriculum. Overview: ERIC Fact Sheet No. 2.

ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, Ohio.

National Inst. of Education (ED), Washington, DC.

[82] 6p.

Information Analyses - ERIC Information Analysis Products (071) -- Reference Materials -- Bibliographies (131)

MF01/PC01/Plus Postage.

*Curriculum Development; *Curriculum Guides; *Instructional Materials; *Military Organizations; *Postsecondary Education; Secondary Education; *Technical Education; *Vocational Education

ERIC; Fact Sheets; *Military Curriculum Project; PF Project

The Military Curriculum Project at the National Center for Research in Vocational Education has been responsible for reviewing approximately 1,400 military courses and selecting those which are applicable to civilian vocational and technical programs. The course materials have been found to be useful as classroom materials and as curriculum resources. Over 150 courses have been selected covering 19 occupational areas. Some examples are: (1) Agriculture: Veterinary Specialist; (2) Building and Construction: Carpentry Specialist; (3) Business and Clerical: Computer System Operation; (4) Photography: Offset Printing; (5) Textiles and Clothing: Fabric Repair Specialist; and (6) Health: Dental Specialist. This fact sheet includes a bibliography of 41 military courses which are available through the Educational Resources Information Center (ERIC) system. (DC)
Military Curriculum.

OVERVIEW: ERIC Fact Sheet No. 2.

by

Larry Arrington

ERIC Clearinghouse on Adult, Career, and Vocational Education
This Fact Sheet gives a basic overview of the Military Curriculum Materials for Vocational and Technical Education Project at the National Center for Research in Vocational Education. It is designed to help increase your understanding of the military curriculum materials that have been selected and adopted for use in civilian, vocational, and technical programs. In addition to this overview, specific examples of military courses available through the Educational Resources Information Center (ERIC) system have been described.

WHAT IS THE MILITARY CURRICULUM PROJECT?

The Military Curriculum Project at the National Center for Research in Vocational Education was funded by the U.S. Office of Education as an effort to increase the accessibility of military curriculum materials to civilian vocational educators. Surveys of civilian vocational technical programs had revealed that while some programs were utilizing military curriculum materials, access to these materials was generally not available to vocational educators. The role of the National Center staff has been to review the approximately 1,400 military courses and select those applicable to civilian programs for dissemination through regional curriculum coordination centers. Courses reviewed have included printed materials from the Air Force, Army, Coast Guard, Marine Corps, and Navy. Access to the materials is provided through a “Joint Memorandum of Understanding” between the U.S. Department of Education and the U.S. Department of Defense.

HOW HAVE THE MILITARY CURRICULUM MATERIALS BEEN USED?

While some courses developed by the military were found to be military-specific and applicable only in military settings, many have been easily adapted to civilian vocational and technical programs. Many vocational teachers have found the military materials useful as a method of introducing new and innovative instructional techniques into their programs. Other teachers have utilized the military curriculum materials as a supplement to materials already in use. Further, the military curriculum materials have been particularly useful in the following ways:

- As a resource for curriculum development
- As vocational classroom materials
- As curriculum materials compatible with the latest equipment and technology
- As in-depth information in unique subject matter areas
- As new simulation techniques in vocational and technical classes

WHAT MATERIALS ARE AVAILABLE?

Over 150 courses have been selected from the military as being relevant to vocational and technical programs in the civilian sector. Many of these courses are now available through the ERIC system. Course materials include programmed instruction, curriculum outlines, instructor guides, student workbooks, and technical manuals. The courses represent the following nineteen occupational areas:

- Agriculture
- Aviation
- Building and Construction
- Business and Clerical
- Communications
- Curriculum and Instruction
- Drafting
- Electronics

ERIC is sponsored by the National Institute of Education. Points of view or opinions expressed in this Fact Sheet do not necessarily reflect those of NIE or the Clearinghouse.
WHAT ARE SOME EXAMPLE COURSES?

Military courses selected for civilian use include both classroom-type courses and individualized correspondence-type courses. In addition, the courses are designed for use in both secondary and postsecondary vocational programs. The following course descriptions are included to provide examples of the specific types of courses that are available. A comprehensive listing of courses is provided at the end of this overview.

- **Agriculture: Veterinary Specialist** This two-part postsecondary course developed by the Air Force is intended to provide training in food inspection; laboratory procedures; subprofessional duties concerning veterinary sciences; sanitary surveillance of food processing, storage, and service facilities; control and epidemiology of zoonotic diseases; and veterinary aspects of disaster medicine. Each of the two parts included in the course contain instructor materials and student texts, study guides, and workbooks. The first half of the course contains four blocks, covering 122 hours of instruction: microbiology (three lessons), medical aspects of food handling (two lessons), food laboratory (two lessons), and meat products (five lessons). The second part of the course contains five blocks of instruction covering eighty-eight hours of instruction: dairy and dairy products (two lessons), miscellaneous foods (two lessons), food technology (two lessons), and animal service and zoonal control activities (four lessons). Instructor materials include a course chart, Specialty Training Standard, for use in student evaluation; lesson plans; and a plan of instruction detailing unit content, lesson duration, objectives, and support material. Student materials include student texts, study guides and workbooks, and programmed text.

- **Building and Construction: Carpentry Specialist** This 233-hour course developed by the Armed Forces is designed to provide basic level training in carpentry. The following topics are covered: carpenter's hand tools, portable power tools, and shop tools; construction and maintenance of wood structures; installation of building hardware; and erection of prefabricated buildings. The plan of instruction, which suggests number of class-instruction, shop, and study hours devoted to each course objective, is based on four blocks of instruction: introduction to carpentry (five units), cabinet construction (nine units), building construction (six units), and building finishing work (seven units). Contents of the lesson plans include criterion objectives, equipment needed, outline with presentation and application, evaluation, and assignments. Study guides present the information needed to complete the unit or make assignments in other publications that contain the required information. Workbooks contain work procedures such as exercises, problems, and questions.

- **Business and Clerical: Computer System Operation** This programmed course developed by the Army is designed to provide the necessary information to perform all steps that are required to prepare a job for processing on a computer system. The plan of instruction gives objectives and references for the ten lessons included in the course: Introduction to Data Processing; Punch Card Input and Output; Printers; Magnetic Tape; Tape Input and Output; Magnetic Disk Input and Output; Channels Control Units and Physical Addresses; Job Control Language; Concepts in Computer Processing; Application Programs; and Data Representation. Programmed student texts are included for each topic.

- **Photography: Offset Printing** Developed by the Defense Mapping School, this 250-hour secondary and postsecondary course is designed to provide a working knowledge of the operation of maps, charts, and other printed-line work and a general knowledge of the fundamentals of printing-bindery. The course includes lesson plans and student materials (some programmed texts and a workbook). The course consists of two sections: Press Fundamentals (eight lessons) and Offset Press Operating Procedures (five lessons). The lesson plans include objectives, hours of class time, training aids and devices, student materials and equipment, references, lesson outlines, suggested instructional tactics, and student practical exercises and printing problems with grading sheets and answers. The student workbook provides student outlines for each lesson that include objectives, study references, supplementary information, and spaces for student comments.
- **Textiles and Clothing: Fabric Repair**
  Specialist. Comprised of teaching guides, student workbooks, and texts, this course is designed to provide a knowledge of skills required to alter and repair individual clothing, textile, canvas, and webbed items. The course is divided into nine subject areas covering 218 hours of instruction: Inspecting, Marking, Classifying, and Re-sizing (three lessons); Hand Sewing Clothing (one lesson); Machine Sewing Clothing and Textiles (thirteen lessons); Clothing and Textile Shop Operations (two lessons); Nomenclature, Inspection, and Hand Repairs to Canvas (seven lessons); Canvas Repair Sewing Machines (fourteen lessons); Canvas Repair Shop Operations (one lesson); and Tailoring (twelve lessons). Printed instructor materials include lesson plans with both objectives and text references. Practical and written exams are included for some of the subject areas.

- **Health: Dental Specialist**
  This course is designed to provide entry-level apprentice skills to persons who wish to become skilled, specialist-level dental assistants. Course materials included are designed to supplement laboratory or on-the-job learning situations. The course contains a considerable amount of review material and is stated to be suitable for beginning students with background in the basic sciences. Each chapter in the four-volume set is organized around learning objectives, accompanied by text with criterion exercises and answers keyed to the text for self-evaluation. Volume 1, Administration, Safety, and Maintenance, discusses the professional-client relationship and general safety practices. Volume 2, Basic Dental Sciences, covers oral anatomy, physiology, and pathology; dental therapeutics; and microbiology and sterilization. Volume 3, Dental Instruments and Materials, describes the uses of general, restorative, and specialty instruments; and dental materials. Volume 4, Clinical Procedures, describes preventative dentistry programs, dental radiology, general assisting procedures, and specialties.

**FOR FURTHER INFORMATION**

This information sheet has provided a basic overview of military curriculum materials. If you want more comprehensive information related to specific courses, the following resources will help you. These materials may be found in the Educational Resources Information Center (ERIC) collection by using the ED number indicated in the resource listing. The number of military courses and subject areas will expand as additional materials relevant to vocational and technical education are identified and selected for dissemination. You can retrieve these from the ERIC system by manually searching given subject areas or more directly by computer search using the identifier. 

### MILITARY COURSES AVAILABLE THROUGH ERIC

*Note: Recent input of military materials have not yet been assigned an ERIC ED number and so carry the Clearencehouse accession number (CE). These CE numbers are cross-referenced in an index in the back of RIE volumes; the newly assigned ED number for a given document can be determined by consulting this index.*

- **Avionics Instrument Systems Specialist** (CE 0273136).
- **Basic Electronics and Electricity** (ERIC Document Reproduction Service Nos. ED 190875-908).
- **Builders School, Light Frame Construction** (ERIC Document Reproduction Service Nos. ED 183821 and ED 183822).
- **Carpentry Specialist** (ERIC Document Reproduction Service No. ED 183823).
- **Clinical Specialist** (ERIC Document Reproduction Service No. ED 183898).
- **Commissary Store Management** (CE 027442).
- **Communications Computer Programmer** (ERIC Document Reproduction Service No. ED 183895).
- **Computer System Operator** (ERIC Document Reproduction Service No. ED 183824).
- **Construction Electricians/Power and Communications Cable Splicing** (ERIC Document Reproduction Service No. ED 183825).
- **Continuous Photoprocessing Specialist** (ERIC Document Reproduction Service No. ED 183898).
- **Dental Specialist** (ERIC Document Reproduction Service No. ED 183960).
Diver Second Class (ERIC Document Reproduction Service No. ED 183 834).

Drug and Alcohol Abuse (ERIC Document Reproduction Service No. ED 187 934).

Engineering Aid School, Drafting I (ERIC Document Reproduction Service No. ED 183 896).


Fabrication and Parachute Specialist (ERIC Document Reproduction Service No. ED 183 836).

Fire Protection Specialist (CE 027 443).


Instructor Basic Course (CE 027 458).

Law Enforcement Specialist (ERIC Document Reproduction Service No. ED 183 902).


Meat Cutter (CE 027 132).

Medical Laboratory Specialist I (ERIC Document Reproduction Service No. ED 183 828).

Medical Laboratory Specialist II (ERIC Document Reproduction Service No. ED 183 829).


Microfilm/Minilab Specialist (ERIC Document Reproduction Service No. ED 183 827).


Petroleum Supply Specialist (CE 027 444).

Physical Therapy Specialist (ERIC Document Reproduction Service No. ED 183 897).

Refrigeration and Air Conditioning Specialist (ERIC Document Reproduction Service Nos. ED 183 830-832).


Still Photographic Techniques (ERIC Document Reproduction Service No. ED 183 900).

Telephone Equipment Installer Repairman (ERIC Document Reproduction Service No. ED 183 806).

Telephone Switching Equipment Repairman (CE 027 135).


Veterinary Specialist (ERIC Document Reproduction Service Nos. ED 183 819-820).

Weather Specialist (CE 027 133).

XRay Specialist (CE 027 131).

Fact Sheet Writer: Larry Arrington, ERIC Clearinghouse on Adult, Career, and Vocational Education.

Fact Sheet Editor: David Tipton.