EXECUTIVE OVERVIEW

OF THE

NAVAL EDUCATION AND TRAINING

130 SERIES MANUALS

MAY 1993
INTRODUCTION

This pamphlet provides training commanders and managers a brief overview of the NAVEDTRA 130 Series Manuals. It acquaints them with the principles and concepts underlying development of the series and provides general guidance on the application of these manuals within the Navy education and training community.

PHILOSOPHY

The NAVEDTRA 130 series provides fundamental guidance within the Naval Education and Training Command for the development of curricula, the delivery of instruction, and the management and evaluation of education and training programs.

The manuals (listed below) do not supersede the directive policy of Chief of Naval Education and Training Instructions (CNETINSTs) in these subject areas. Rather, they supplement the CNETINSTs in two important ways. First, they reflect the philosophical principles underlying CNET policy for curriculum, instruction, and evaluation, and second, they provide procedural guidance for carrying out the policy.

LIST OF MANUALS IN SERIES

NAVEDTRA 130: Task Based Curriculum Development Manual - February 1993
NAVEDTRA 131: Personnel Performance Profile Based Curriculum Development Manual - February 1993
NAVEDTRA 134: Navy Instructor Manual - August 1992

CURRICULUM DEVELOPMENT BACKGROUND

To better understand the purpose of the NAVEDTRA 130 series it is necessary to briefly discuss the events that led to its development. More than 20 years ago, Navy policy called for the use of a "Systems Approach" to training. Two systems approach methods of curriculum development emerged within different Navy warfare communities; The Task Analysis (TA) method and the Personnel Performance Profile (PPP) method.
The TA method was described in the original 1977 NAVEDTRA 110 Manual titled *Procedures for Instructional Systems Development (ISD)*. This is a Task Analysis ISD Model based on the Job Task Inventory (JTI). Curriculum is developed using the theory that each job consists of associated duties and tasks which form the basis for training someone to perform the job. This method of curriculum development lends itself well to courses that teach theory or fundamental skills, and is the basis for a large majority of current Navy courses.

The other systems approach was an Equipment/System/Subsystem (ESS) based model with the basic element being the Personnel Performance Profile (PPP). The *Submarine Training Development and Production Specifications* manual, published as NAVSEA OD 45519 addressed this systematic approach. Curriculum is developed using the theory that PPP tables, derived from ESS specifications, form the basis for training personnel to operate, maintain, or repair specific ESS. Initially this method was used for development of submarine training, more recently it has also been used to develop new surface warfare courses.

In the mid-1980's an attempt was made to adopt the PPP based method as a "Single Standard" for the development of new training materials. To direct this effort, the Navy produced the DOD Handbook 292, titled Training Materials Development.

Shortly after this attempt to implement the PPP based "Single Standard," major segments of the Training Community deemed that it was neither economically feasible nor necessary to convert the large volume of existing TA based curriculum to the PPP based standard. Consequently broad policy waivers were granted to continue use of the Task Analysis method of NAVEDTRA 110 where applicable.

Because of the strong community preferences and economic conditions noted above and recognizing that hardware and non hardware based curriculum had distinctly separate design requirements, a policy change was implemented in 1990 to sanction use of both TA and PPP based methods. Subsequently, the Navy influenced incorporation of this policy into MIL-STD 1379D. This December 1990 publication is the DoD standard for development and acquisition of military training materials.

Today, the development of all training materials, whether by contract or inhouse by Navy military/civilian personnel, will be in accordance with the specifications of MIL-STD 1379D. The NAVEDTRA 130 series documents are based upon this military standard and provide the training community with a complete set of documents which cover both TA & PPP curriculum development methods.
Within the NAVEDTRACOM, either method may be used to develop curriculum: the TA based method with procedural guidance in the NAVEDTRA 130 manual, or the PPP based method with procedural guidance in the NAVEDTRA 131 manual. Choice of the method is a front-end-analysis decision made at the onset of the curriculum development project. CNETINST 1550.10 (series) provides a multiple question model to guide managers in making this decision.

MANUAL APPLICATIONS

Each of the 130 series manuals is designed as a stand alone document to serve a specific user group such as curriculum developers, instructors, education/training managers or evaluators of education and training. The manuals are, however, interrelated and appropriately cross reference one another. A synopsis of each of the NAVEDTRA 130 series manuals is provided below.

NAVEDTRA 130 - Task Based Curriculum Development Manual
(Replaces NAVEDTRA 110A):

NAVEDTRA 131 - Personnel Performance Profile Based Curriculum Development Manual (Replaces DOD-HDBK 292 for application of the PPP method within the NAVEDTRACOM):

These manuals provide guidance for developing curriculum according to the two traditional Navy methods discussed within the Background section of this overview. Although their content differs, the two manuals have the same organizational format with each containing three volumes as described below.

○ **Volume I - Developers Guide:** contains the standards and conventions for each phase or stage of the education/training program development process. It is designed for use by the individual actually revising or developing the curriculum and training materials. Target users of this Volume are Navy subject matter experts (E5 & above) who hold instructor NEC 9502 and are graduates of either the TA or PPP curriculum developer courses.

○ **Volume II - Sample Products:** this volume has been designed to be used concurrently with Volume I for the purpose of illustrating each product in respect to layout, content, format, and style. Volume II provides either the Developer or Manager ready access to sample documents whenever the need may arise.

○ **Volume III - Managers Guide:** is designed for the individual charged with the management of a course revision or development. Managerial issues such as the Training Project Plan, Conducting the Course Pilot and Evaluation, and curriculum development approval points and authorities are discussed in detail.
Table 1 displays the products or accomplishments associated with each phase of the Task Analysis based curriculum development process.

**TABLE 1. Process Phase and Product**

<table>
<thead>
<tr>
<th>PROCESS PHASE</th>
<th>PRODUCT *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>Training Project Plan</td>
</tr>
<tr>
<td>Analyze</td>
<td>Course Training Task List</td>
</tr>
<tr>
<td>Design</td>
<td>Curriculum Outline of Instruction, Preliminary Training Course Control Document (TCCD)</td>
</tr>
<tr>
<td>Develop</td>
<td>Lesson Plan, Tests, Trainee Guides, Instructional Media Material, Course Pilot, Pilot Course Monitoring Report</td>
</tr>
<tr>
<td>Implement</td>
<td>Final Curriculum, Final TCCD, Letter of Promulgation</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Internal and External</td>
</tr>
</tbody>
</table>

Table 2 displays the products or accomplishments associated with each stage of the Personnel Performance Profile based curriculum development process.

**TABLE 2. Process Stage and Product**

<table>
<thead>
<tr>
<th>PROCESS STAGE</th>
<th>PRODUCT *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Training Project Plan</td>
</tr>
<tr>
<td>Stage One</td>
<td>PPP Table List, New and Modified PPP Tables, Training Path System</td>
</tr>
<tr>
<td>Stage Two</td>
<td>Preliminary Training Course Control Document (TCCD)</td>
</tr>
<tr>
<td>Stage Four</td>
<td>Course Pilot, Pilot Course Monitoring Report</td>
</tr>
<tr>
<td>Stage Five</td>
<td>Final Curriculum, Final TCCD, Letter of Promulgation</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Internal and External</td>
</tr>
</tbody>
</table>

* Products depicted in bold print are submitted to the Curriculum Control Authority (CCA) for approval.

Note that both methods deliver the same curriculum materials; however, the developmental process involves the production and use of different baseline data. TA based curricula centers around the Course Training Task List, and PPP based curricula centers around the use of pre-existing, modified, or new PPP Tables.
NAVAEDTRA manuals 130 and 131 primarily focus on procedures for the development of curriculum to train the manipulative skills and related knowledge necessary to perform specific Navy jobs, or to operate or maintain specific Navy equipment/systems. As such they deal with the *psychomotor and cognitive domains of learning*, which are fundamental to the technical nature of most Navy training.

NAVEDTRA 132 addresses management/leadership training and other seminar type instruction. As such it deals with the *affective domain of learning*, that is, writing curriculum that provides education and training experiences which have “affect” on how the learner “thinks and feels” about the subject.

**NAVEDTRA 132 - Management/Leadership/Seminar Curriculum Development Manual:**

This manual deals primarily with the design and development of education and training programs that stimulate the students’ internalization process of learning. This process ranges from the lowest level of simple awareness of a given concept to a level where the concept is internalized to a position of influence in decision making. For example, managers attending a leadership course are introduced to a particular concept through various methods, such as role playing, case studies, and group discussion. The goal is that the managers/leaders will adopt and utilize the concept in their day-to-day activities.

**NAVEDTRA 133 - Team Training Curriculum Development Manual:**

This manual builds upon the development procedures for skill and knowledge education/training presented in the 130 and 131 manuals, and the management concepts in the 132 manual. It extends these procedures and concepts to address the design and development of scenarios and other approaches unique to team training.

In these situations, the team mission provides the basis for training objectives, but tasks must still be performed by individuals, and interaction between team members is critically important. Team training could range from a single shipboard fire fighting team to multi-platform combat system teams engaged in force level war-gaming exercises.

Although the Navy has previously developed curriculum for leadership/management education and team training, this is the first attempt to document the process so that future development efforts may benefit from lessons learned during previous experiences.
NAVEDTRA 134 - Navy Instructor Manual:

This manual establishes a philosophical basis for Navy classroom instruction and also serves the following practical purposes:

- Supplemental text for formal Instructor Training (IT) Courses. Each student attending a basic IT course is given a copy to use during the course and keep as a future reference.
- Primary text for a correspondence course to be completed by reserves as a prerequisite to their 2-week IT course. This allows reservists to earn instructor NEC 9502 during normal ACDUTRA.
- Source guide for instructor in-service training programs.
- General reference for anyone assigned to Navy instructor duty.

NAVEDTRA 135 - Navy School Management Manual:

This manual provides the processes, procedures, and documentation required for the management of NAVEDTRACOM schools. It is intended to provide a single primary source of procedural guidance for implementing policy established by the OPNAV and CNET instructions currently in effect. Following a description of the organizational structure and responsibilities of the NAVEDTRACOM chain of command, this manual discusses in detail four functions typically performed in the training environment. These are:

- Staff Management
- Student Management
- Curriculum Management
- Evaluation Management

The manual concludes with a discussion of Support Functions available to the Navy Education and Training Command, for example, NITRAS, contract management, and automated data processing.

Figure 1 charts the preliminary steps to initiating curriculum development. While these steps are not part of actual curriculum development and most apply only to major OPNAV sponsored projects, they are essential to understanding the broader education and training management process.

Figure 2 charts application of the NAVEDTRA 130 manuals in development and implementation of curriculum, delivery of instruction, and management and evaluation of education/training programs.
PRELIMINARY STEPS TO INITIATING CURRICULUM DEVELOPMENT

[1] PERCEIVED NEED FOR TRAINING
NEW WEAPON SYSTEM PROCUREMENT OR INPUT FROM NAVY TRAINING FEEDBACK SYSTEM
(ONNAVINST 1500.71)
IDENTIFY REQUIREMENT FOR NEW/REVISED CURRICULUM & TRAINING MATERIALS
SPONSOR # FOR NEW/REVISED OCCSTD
(ONNAVINST 1500.74)

[2] CONDUCT TRAINING TASK ANALYSIS
TO PRODUCE RECOMMENDED TRAINING TASK LIST
(CNETINST 1550.21)

[3] CONDUCT NAVY TRAINING REQUIREMENTS REVIEW
TO VALIDATE CURRICULUM REQUIREMENT
(ONNAVINST 1800.68)

[4] DEVELOP TRAINING PROJECT PLAN (TPP)
(CNETINST 1550.10)
(NAVETRANS 130/131/135)

[5] REVIEW, APPROVE & FUND TPP
APPROVE PENDING FUNDS
CLARIFY/ADJUST
APPROVE & FUND
OUT TO RESOURCES TRACK
HOLD

NOTE: WITH APPROVAL AND FUNDING OF A TPP, CURRICULUM DEVELOPMENT AND PRODUCTION OF TRAINING MATERIALS BEGINS AS CHARTED IN FIGURE 2. CONCURRENTLY, PROCEDURES ARE INITIATED TO ACQUIRE OTHER RESOURCES NECESSARY FOR IMPLEMENTING THE TRAINING. THESE INCLUDE INSTRUCTORS, STUDENTS, FACILITIES, EQUIPMENT & SUPPLIES.

Figure 1. Preliminary Steps to Initiating Curriculum Development
Figure 2. Curriculum Development and Education/Training Management Process