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Training System Development Model Overview



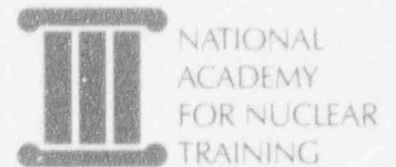
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PURPOSE

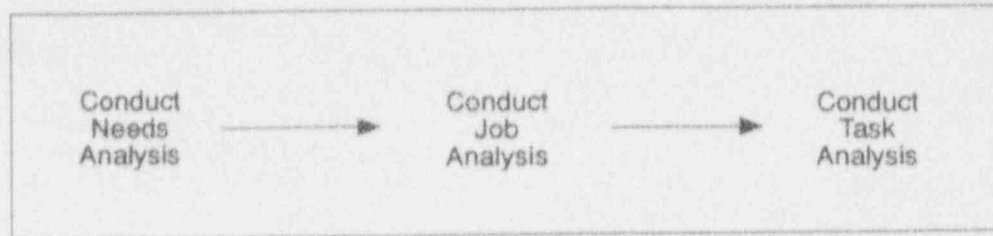
Training System Development (TSD) represents one approach to performance-based training. This overview describes the TSD model and its inputs, methods, and products. Subsequent pages summarize TSD analysis, design, development, implementation, and evaluation phases. Activities within each phase are discussed, and their respective products are identified. Although shown in the sequence appropriate for initial development, TSD activities should be performed based on the status of existing programs and other practical constraints. TSD offers a framework for action. When used to complement existing efforts and guide new developments, it can help improve training system performance.

Additional information on this approach to performance-based training can be obtained from the Training System Development manual or by calling the Manager, Training Activities Department.

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ANALYSIS provides a method of responding to changes in human resource requirements, solving job performance problems, and learning from operating experience. It begins by gathering the facts needed to make informed training development decisions. This is necessary to make sure that apparent concerns can be resolved through training. If the facts confirm a valid training need, job analysis uses existing job data and incumbent employees to identify and rate job tasks. Tasks rated difficult and important are selected for training. Their exact methods of correct performance and underlying competencies are then determined through task analysis. Completing this process reveals reliable information on safe work practices. The skills, knowledge, and attitudes identified provide a task-specific content reference for both new and existing programs.

ANALYSIS



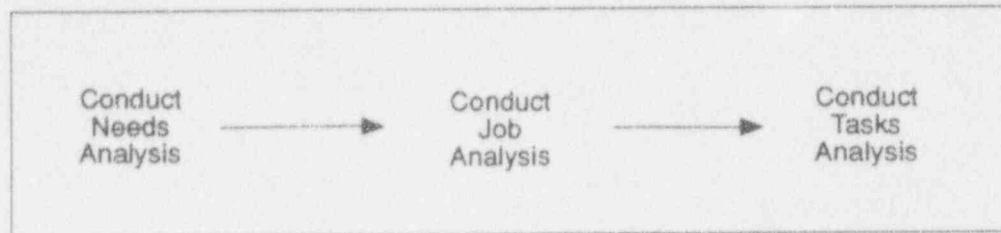
COMPLETING THESE ANALYSIS STEPS:

- identifies valid training needs
- selects job tasks for training
- describes the skills, knowledge, and attitudes required for safe task performance

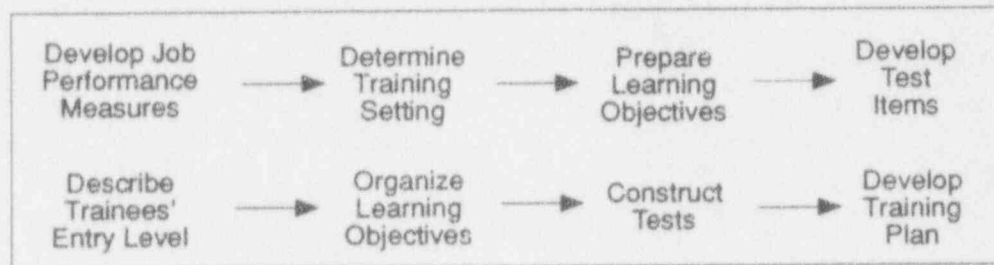


DESIGN uses the task performance information collected during analysis to specify, in measurable terms, the job skills, knowledge, and attitudes that training will develop in the learner. Job performance measures are prepared for each task. By defining how individual tasks are performed, they focus training development efforts and support in-plant training and qualification. Learning objectives are developed for groups of task-related knowledge and skills. These written statements define exactly when, what, and how well the trainee must perform during training. Tests are produced to ensure that these competencies are reliably evaluated. Together, these measures of observable employee behavior serve as the program design basis. Decisions on training setting, trainee entry qualifications, and organization of learning objectives are also made. Design concludes with development of a training plan.

ANALYSIS



DESIGN



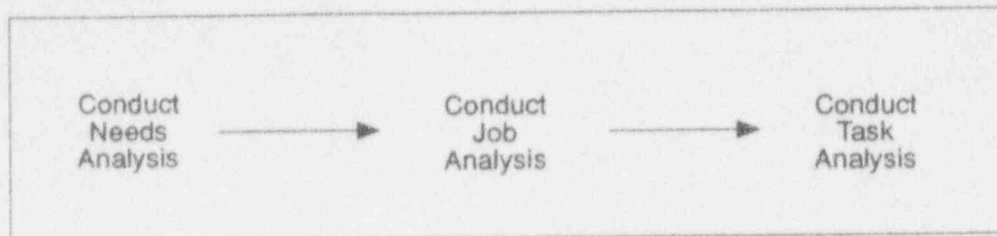
COMPLETING THESE DESIGN STEPS:

- provides step-by-step guides for evaluating task performance
- identifies tasks for classroom, laboratory, in-plant, simulator, and self-study training
- provides measurable learning objectives
- defines what the trainee should know prior to training
- groups learning objectives for efficient training and testing
- provides reliable tests of trainee performance
- provides a training plan

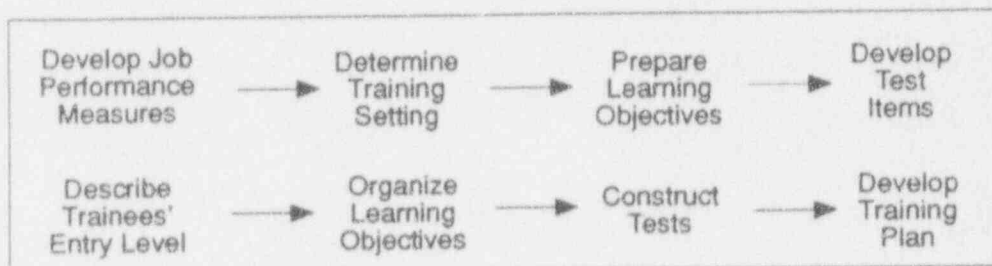


DEVELOPMENT organizes the instructional materials needed for trainees to achieve the learning objectives. Emphasis is on maximizing the use of existing materials and resources. Instructor and trainee activities are defined using the job performance measures, learning objectives, and tests produced in design. These activities describe how the instructor and trainees will perform during training to achieve the learning objectives. Existing, suitable training materials and lesson plans are selected, and new ones are produced as required. Resulting training materials are reviewed for technical accuracy, tried out with a group of trainees, and revised as necessary. Performance-based training materials are the products of this phase.

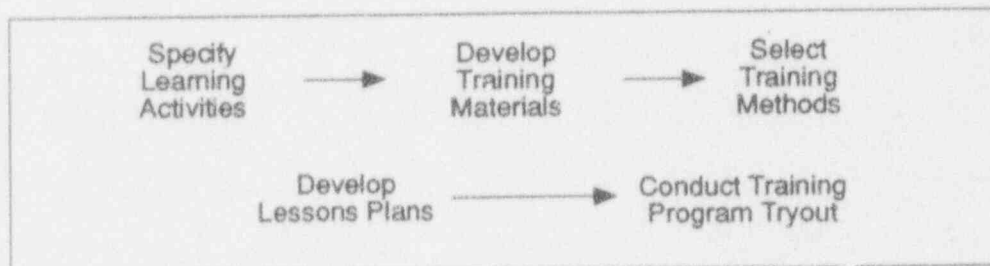
ANALYSIS



DESIGN



DEVELOPMENT



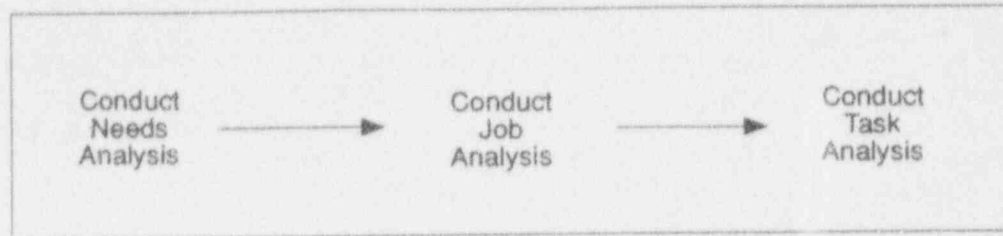
COMPLETING THESE DEVELOPMENT STEPS:

- describes what the trainee and instructor will do to achieve the learning objectives
- provides performance-based training materials
- identifies methods of instruction
- provides lesson plans
- verifies the accuracy of training materials

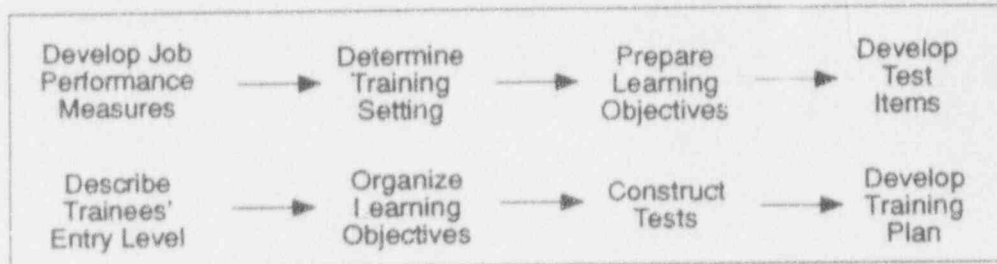


IMPLEMENTATION is the process of putting training programs into operation. It begins by activating the training plan. Instructors are selected and trained, and the availability of trainees, facilities, and resources is confirmed. Training is delivered as planned, and trainee and instructor performance is evaluated. These evaluations serve two purposes. First, they verify that trainees have achieved the learning objectives. Second, instructor performance problems can be detected and solved. Key records are maintained to support management information needs and to document the performance both of trainees and instructors.

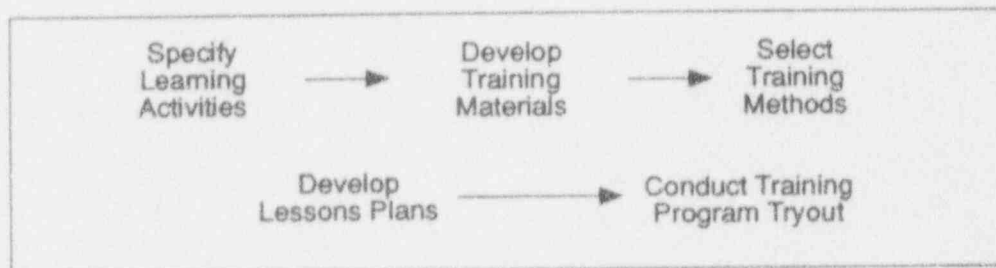
ANALYSIS



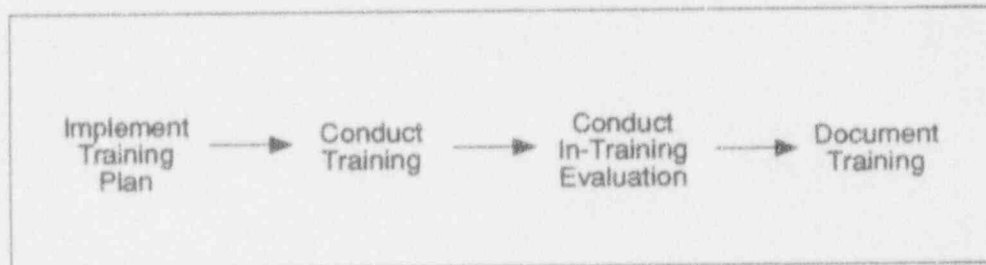
DESIGN



DEVELOPMENT



IMPLEMENTATION



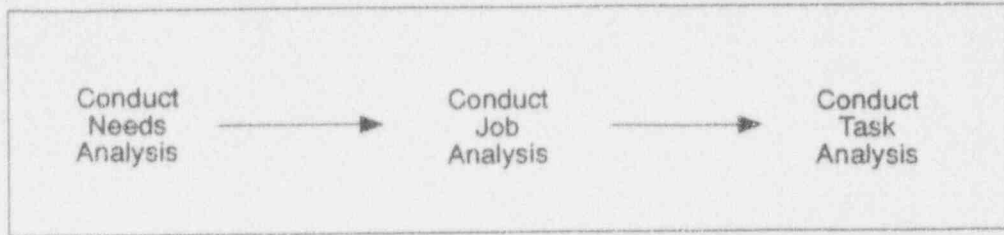
COMPLETING THESE IMPLEMENTATION STEPS:

- produces accountable training
- provides trained employees
- produces trainee and instructor performance data
- supplies training management information

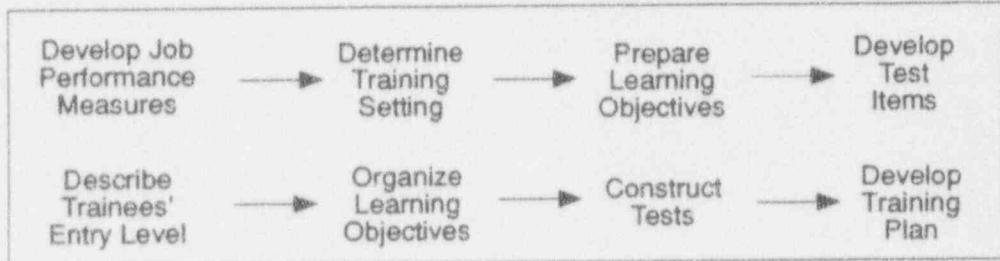


EVALUATION ensures training's continuing ability to produce qualified employees. By monitoring such indicators as employee job performance, plant and procedure changes, and operating experience, evaluation helps maintain and improve the training program. It is the dynamic process of assessing performance, identifying concerns, and initiating corrective actions. The program feedback it yields enables training to respond adaptively to unforeseen problems or changing conditions. Completing evaluation steps produces the performance data and feedback vital to any training system.

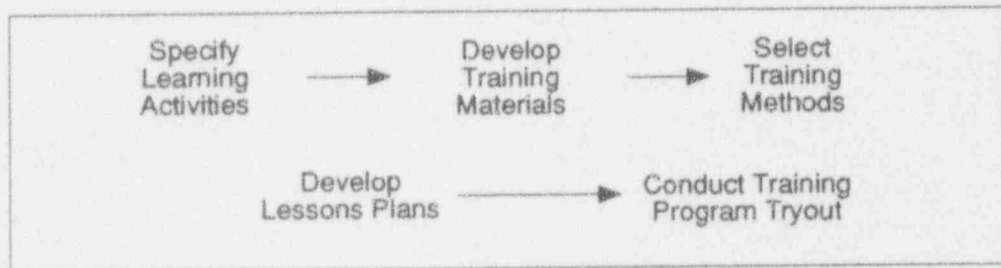
ANALYSIS



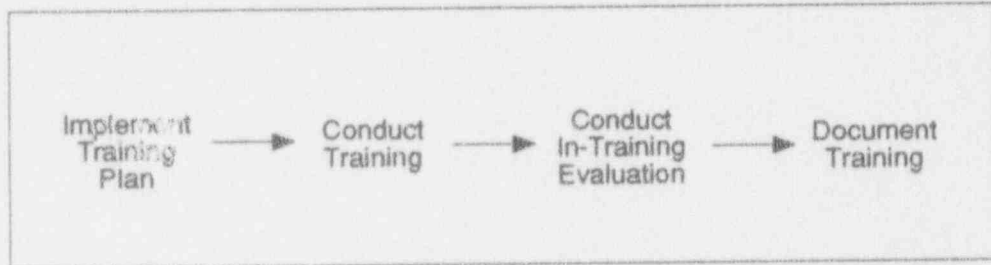
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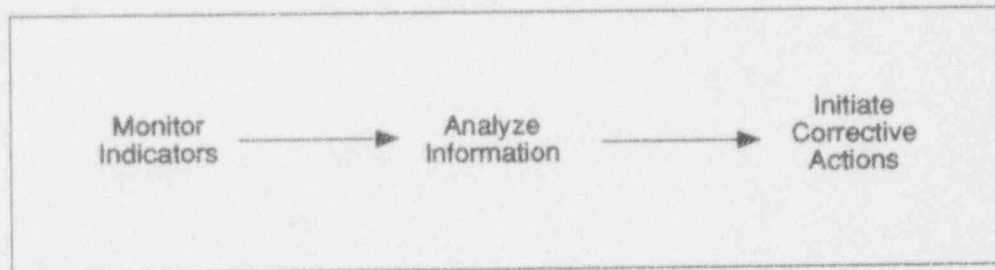
DEVELOPMENT



IMPLEMENTATION



EVALUATION



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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

April 19, 1994

MEMORANDUM FOR: Darlene Huyer
Anstec, Inc.

FROM: Tremaine Donnell, INPO Coordinator
Records and Archives Services Section
Information and Records Management Branch
Office of Information Resources Management

SUBJECT: ESTABLISHMENT OF DATA RECORD FOR INPO
DOCUMENTS

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Tremaine Donnell, INPO Coordinator
Records and Archives Services Section
Information and Records Management Branch
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Enclosure: As stated

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cc: JDorsey