Original Air Force ISD Model

The original Air Force Model was a five-step process, shown in Figure 1.

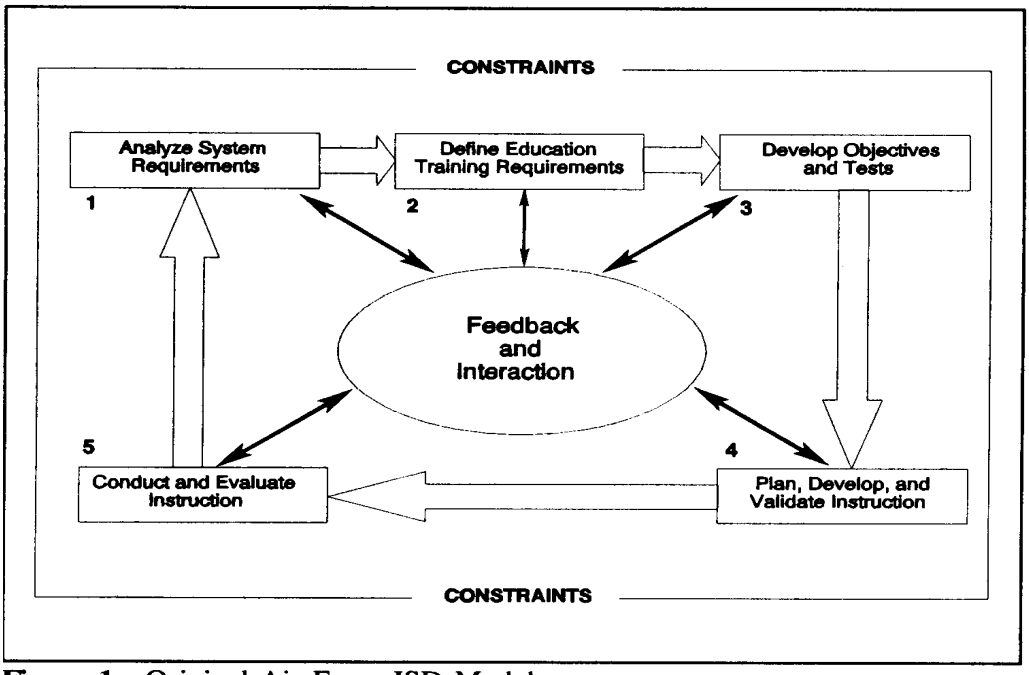

Figure 1. Original Air Force ISD Model

Description of the Model

The original Air Force model organizes the ISD functions into five steps.

1. **Analyze System Requirements**

   This is done through occupational, job, and task analyses which result in statements of behavior, conditions, and standards for task performances.

2. **Define Education and Training Requirements**

   This step includes a needs analysis to determine if training is needed, assessment of target population characteristics, and selection of tasks for instruction through consideration of such factors as criticality, learning difficulty, and frequency of performance.

3. **Develop Objectives and Tests**

   Here the developer writes the three-part objectives that define what the students should be able to do after instruction, the conditions under which they may perform, and the acceptable standard of performance. The developer then writes test items to measure student performance on each objective.

4. **Plan, Develop, and Validate Instruction**

   In this step, the developer designs and produces course materials. The developer tries these materials out on students using the criterion test items to ensure that the students can achieve course objectives.

5. **Conduct and Evaluate Instruction**

Here the course is fielded. Evaluation of instructional effectiveness continues for the life of the course and identifies needs that may develop for improving or updating the instruction.

Feedback and Constraints

This original model also shows (1) how the ISD process uses feedback and interaction among the functional blocks of activities to allow for continuous improvements to the products, and (2) how environmental constraints limit the designers' choices to what is possible.

Flexibility

The process allowed instructional developers to enter or reenter the steps of the ISD process as necessary to develop, update, or revise the instructional system. The Air Force model worked well and was considered adequaThe te. It supported an instructional system that was focused primarily on classroom education and technical training delivered by an instructor using the lecture/demonstration method.

Need for Updating

The Air Force instructional goals, which have not changed, are to field effective and efficient instructional systems that prepare individuals to meet Air Force performance requirements. However, the process, which served the Air Force well for many years, needed to be updated. Constant changes in the instructional environment, increasingly complex job requirements, new instructional technologies, and emerging automated instructional development tools, as well as other changes, stretched the capabilities of the Air Force ISD process. This led to a belief that the linear approach to ISD was not adaptable to today's conditions.