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Education/Training

**INFORMATION FOR DESIGNERS  
OF  
INSTRUCTIONAL SYSTEMS**



**INSTRUCTIONAL TECHNOLOGY  
AND  
DISTANCE LEARNING**

**DEPARTMENT OF THE AIR FORCE**

## FOREWORD

Instructional Technology – using technology to enhance the learning experience. Whether through the use of self-paced, computer-based instructional programs, or through the use of video conferencing technology to bring subject matter experts into the classroom – the proper use of technology can greatly increase the effectiveness and efficiency of training.

Instructional technology can be inserted into the classroom to support traditional instruction (technology insertion) or it can be used to expand the reach of training through distance learning, where instructors are physically separated from the learners and where the learners may be separated from each other.

With increasing frequency, distance learning is becoming the instructional solution of choice. Because distance learning usually employs multiple technologies, the development of a distance learning program requires the active participation of numerous specialists. These specialists make up the cross-functional team responsible for the analysis, design, development, implementation and evaluation of the distance learning program. Each member of the team fulfills a unique function.

As the distance learning development process involves more hardware and software integration, and other functional specialists assume roles of increasing involvement, instructional designers must become the guardians of educational integrity. There are a number of reasons for this.

- The education and training community does not control many of the resources that are employed during the development and implementation of a distance learning course.
- Those who control the technology assets on which distance learning is based have often sought to exploit their technologies – to showcase new capabilities – sometimes without adequate guidance on the principles of education and training.

Technology cannot drive the learning experience; technology is simply the way in which instructional content is transmitted to the learner. It can either facilitate learning or impede learning. The instructional designer must ensure that the selected technology complements the established objectives and provides the best instructional solution.

In order to assume this responsibility, instructional designers must understand the technology options. They must understand the capabilities and limitations of each technology and the impact it has on the learner and the learning environment. In order to participate as an effective team member, instructional designers must fully appreciate the expertise that each member of the team contributes to the final product. This handbook is designed to address these issues and provide the guidance necessary to encourage instructional designers to ask the right questions as technologies evolve.

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This volume provides information and guidance for designers of instructional systems on how and under what conditions to incorporate training technologies into the Instructional System Development (ISD) process. This guidance addresses the use of instructional technologies in both resident and non-resident instructional systems. This handbook is not a directive. It should be used in conjunction with MIL-PRF-29612 and its supporting handbooks.

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