

Definition of Instructional Technology

Definitions of instructional technology are many and are ever evolving since the first formal efforts were made to define the field (Seels & Richey, 1994). While the definitions of IT are as varied as the experts who have written them, there are some key areas of influence and focus in regard to the field of IT. These areas include the influence of media in education, the psychology of instruction and systematic approaches to education (Seels, 1989).

The focus of some of the first definitions of the instructional technology, were on instructional media: "The physical means via which instruction is presented to learners" (Reiser & Dempsey, 2002, p. 7). These early definitions have been traced back to the early part of 20th century when educational films was first being produced. This led to an increase in the use of visual materials in schools. As advancements in media were being discovered, such as sound recordings, radio broadcasting, and motion pictures with sound and then the popularity and growth of television the shift was made from a visual format to an audiovisual format as a delivery of instruction (Reiser & Dempsey, 2002). Even as the field of IT has evolved to encompass much more than just media, many professionals still focus on the media aspect of instructional technology (Reiser & Dempsey, 2002).

It was during the 60's & 70's that a number of leaders within the field of education started discussing instructional technology in a different way. Instead of referring to instructional technology simply as it related to media, they started discussing it as a process (Reiser & Dempsey, 2002). Two of those educational leaders who offered new ways of looking at instructional technology were by Finn (1960) and Lumsdaine (1964). Finn thought instructional technology should be viewed as a way of looking at instructional problems and examining feasible solutions to those problems (Finn, 1960). Lumsdaine indicated that "instruction" could be thought of as an application of science to instructional practices (Lumsdaine, 1964).

In 1970 the Commission on Instructional Technology, defined instructional technology as "a systematic way of designing, carrying out, and evaluating the total process of learning and teaching in terms of specific objectives, based on research in human learning and communications, and employing a combination of human and nonhuman resources to bring about more effective instruction" (Commission on Instructional Technology, 1970, p. 19). This definition exemplifies instructional technology as a changing field with a focus on a systematic process of delivering instruction. Another simple and straight forward definition of the field is Instructional Technology that also includes the practice of systematic approach is offered by Armsey and Dahl (1973). They defined Instructional Technology as "the things of learning, the devices and the materials which are used in the processes of learning and teaching" (Armsey & Dahl, 1973, p. vii).

As instructional technology evolved from its beginnings as an audio visual movement to a field of study, a new definition was necessary to incorporate the new elements into the definition (Seels & Richey, 1994). While there is not one universal definition of IT, one of the most frequently used definitions is the 1994 definition of IT offered by Seels and Richey and the Association for Educational Communications

and Technology (AECT). They define IT as “the theory and practice of design, development, utilization, management and evaluation of process and resources for learning” (Seels & Richey, 1994, p. 9). This definition can be broken into components within Instructional technology;

- **Theory and practice** - Theory is based on the concepts, principles and schemes that contribute to the body of knowledge and practice refers to the application of that knowledge to solve problems.
- **Design, development, utilization, management and evaluation** – Each of these domains have a specific scope and area of knowledge that have evolved into a separate area of study.
- **Processes and resources** – A series of operations or activities is a process that is followed to lead to a defined result and the resources are the instructional materials that help support learning.
- **Learning**- “Learning is the goal and instruction is a means to learning” (Seals & Richey, 1994, p. 12).

The conceptual framework of this definition illustrates how the relationships between the five domains within the field of instructional technology are not independent from one another. Each of the domains addresses both the knowledge base of the field and the functions that are performed by professionals (Seels & Richey, 1994). From this illustration each of the domains and the sub-domains within them are further described and defined within my portfolio.

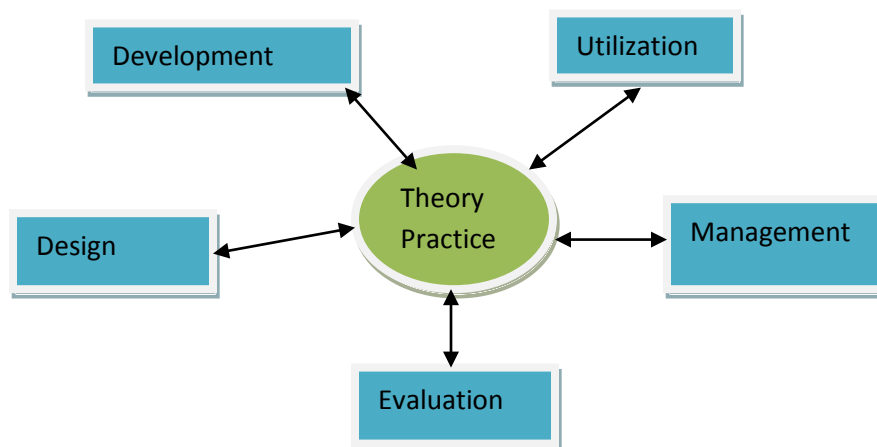


Figure 1: The Definition of Instructional Technology

(Graphic adopted from Seels, B. & Richey, R. (1994) *Instructional Technology: The definition & domains of the field*, p. 10)

The most recent added focus to the field has been on the improvement of performance in the workplace. These improvements may be brought about by using instructional interventions that include an in-depth analysis of the nature of performance problem; but the solutions are often non-instructional interventions which could include incentives, reward structures, enhanced feedback and performance support systems (Reiser & Dempsey, 2002). The 1994 AECT definition made specific reference to some performance technology concepts that have expanded the nature of the field (Reiser & Dempsey, 2002).