The definition of Instructional Technology as Interpreted by the Association for Educational Communications and Technology

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The Association for Educational Communications and Technology defined Instructional Technology in 1994 as the following: “Instructional Technology is the theory and practice of design, development, utilization, management and evaluation of processes and resources for learning” (Seels & Richey, 1994, p.1).

This definition is the most recent given for Instructional Technology by the AECT. The scope of the definition is expansive and each component of the definition must be further analyzed and exemplified in order to be fully perceived. Seels & Richey (1994) probe further into the AECT definition, and clarify the significance of each of its elements.

One of the strengths of the definition is the inclusion of “theory and practice” in the first part of the definition. This justifies and enforces the concept of Instructional Technology as a field of study, rather than just a profession. Instructional Technology is now recognized as a field in itself due to the fact that both theory and practice are major components of the field. As Seels & Richey (1994) acknowledged, Instructional Technology has undergone a process of evolution from the 1950s, and has grown and matured into a full-fledged area of study which includes not only the practical application, but also the theoretical knowledge. This union of theory and practice has given the field its deserved recognition and standing.

The field of Instructional Technology’s includes its domains: “design, development, utilization, management, and evaluation” (p. 1). Each domain constitutes an area of concern in Instructional Technology. Development and design are classified as the largest and most general domains in the field. Development is termed as the largest practical domain, and design is described as the largest theoretical educational domain. Any form of instructional technology must go through a process of design and development, and considers the utilization, management, and evaluation of the design and development. However, the utilization, management, and evaluation of instructional technology rely more on specific instructional situations and settings in their application and therefore are not general domains. Because of this, they play important roles in instructional technology, but rely more on definite and distinct applications.
Seels & Richey’s exploration of the term “processes” incorporates the design and delivery of instruction. The initial component of instruction is the design of a particular learning concept, followed by the delivery of the design. Process includes the “input, actions, and output” (Seels & Richey, 1994, p. 12) of an instructional objective. As Seels & Richey (1994) explained, “A process is a series of operations or activities directed towards a particular result” (p. 11).

Resources “are the sources of support for learning, including support systems and instructional materials and environments” (p. 12). Processes are determined based on the resources to be used, and the resources depend on the instructional objective, and the means in which this objective can be most effectively accomplished. Resources include the hardware (tools), and software (information) utilized and practiced in order to produce the learning of a concept or objective (Seels & Richey, 1994, p. 7).

The ultimate goal in Instructional Technology is effectual learning. This last portion of the definition justifies and validates the purpose of “the theory and practice of design, development, utilization, management and evaluation of processes and resources” (Seels & Richey, 1994, p.1). Since Instructional Technology’s main objective is accomplished learning, the means in which Instructional Technology is achieved is through the knowledge and application of its theories, and the concern for and integration of all the domains of this field.

The fact that the definition has such an extensive scope is its main strength. Its principal weakness is its lack of clarity. Only through further explanation of each term, concept, and domain, can the definition be less ambiguous.

Prior to reading the Seels & Richey (1994) chapter, my own definition of Instructional Technology was closer to the layman’s definition and focused less on theory and more on the practice of instruction and its use of technological media, principally computers. Instructional and educational meant the same to me, although after reading the chapter, the word instructional has a greater range of audience than does the term educational. Seels & Richey (1994) explained that educational technology is considered more limited to an educational (K to 12) setting,
whereas instructional technology incorporates not only an educational setting, but also a commercial setting and the instructional training of personnel in an enterprise.

My interpretation of technology was limited to the actual media and tools used to effect learning. Now, Braundel’s definition of technology as the “application of science and the improvements in processes and tools to build knowledge” (Seels & Richey, 1994, p. 7) and Mauss’ observation that technology is “a traditional action made effective” (p. 6) give technology a much wider significance. My definition is no longer limited to just tools and materials, but also to a more systematic application of methods that satisfy specific objectives in learning.

The popular (layman’s) definition of the field is similar to my own original definition of the field and limited to the use of computers and the concept of on-line and Distance Education. Technology always includes the application of science but not always does it include machines and electronics. The layman’s definition of this term assumes that technology always employs these, and is contingent upon the use of machines and electronics in order to be classified as Instructional Technology.

Due to the scope of the definition given to Instructional Technology, the change within the past eight years in Instructional Technology has, in my opinion, little import on the definition. The definition still serves its purpose and fits into the development and expansion of Distance Education over the past years.

I see Distance Education as a subdivision of Instructional Technology with its own specialized theories and practicalities. The tools, theories, techniques, and strategies utilized for effecting Distance Education are more limited and restricted than those for Instructional Technology, but do not only pertain to Distance Education. The tools, theories, techniques and strategies in Distance Education can be utilized effectively and fit appropriately into the larger category of Instructional Technology as defined by the AECT.
References