

Instructional Technology

A Profession vs. a Field of Study

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INTRODUCTION

The term *distance education* is commonly used to describe courses in which nearly all the interaction between the teacher and student takes place electronically. Electronic communication may take the form of audio, video, e-mail, chat, teleconferencing, and, increasingly, the Internet. Distance education courses range from short-term training workshops to undergraduate and graduate programs

for college credit. Faculty teaching distance education courses must become proficient in the communications technology employed in their distance education courses. They must be prepared—either on their own or working in teams with other specialists—to design courses that take full advantage of the potential of the medium in which they are operating. Faculty teaching Web-based courses must possess strategies and skills to communicate with their students electronically in the absence of visual and oral cues (American Federation of Teachers, AFT, 2000).

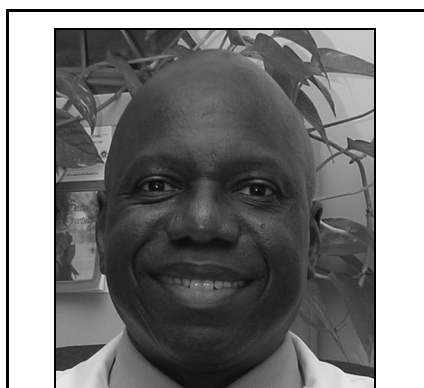
of processes and resources for learning” (Seels & Richey, 1994, p. 1). Distance education can be described as “teaching-learning relationships where the actors are geographically separated and communication between them is through technical media such as audio and video teleconferences, audio and video recordings, personal computer, correspondence texts, and multimedia systems” (The American Journal of Distance Education, AJDE, 2004).

As described by AJDE (2004), with the increasing numbers of institutions of higher learning becoming involved in distance education, the role of educators who are involved with these institutions is expanding to more than that of just an instructor, but as an instructional systems designer or a technologist, involved in the process of:

INSTRUCTIONAL TECHNOLOGY: PROFESSION OR FIELD OF STUDY?

Instructional technology and distance education is a functional process whereby instruction and learning take place over space and time that are physically separated from one another. This is in keeping with the 1994 definition of the field, which states that “instructional technology is the theory and practice of design, development, utilization, management and evaluation

- developing effective programs,
- selecting media and using them appropriately,
- designing for interaction,
- researching findings about student achievement and satisfaction,
- researching the changing roles of instructors and learners, and
- developing administrative and policy issues.



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Seels and Richey (1994) make reference to a description of instructional technology as the application of technological processes and tools that are used to solve problems of instruction and learning. The definition should not be confined to belonging to a profession, since it is both educational technologist and instructional technologist that encompass the definition of instructional technology and distance education. The educator, as instructional technologist, is first an educator, and subsequently an instructional technologist; the reverse is not necessarily true. Instructional technology involves theories as well as design and delivery of instruction. To limit the definition to that of a profession would exclude individuals who may not be involved with the design of the system, but are involved with utilizing various media in the delivery of instruction, and who have an understanding of the various styles and needs of learners. There are many who would categorize instructional technology as design of the system and educational technology as delivery of the results of the design. In this instance, instructional technologist can be defined as a profession. But, there is more at stake in instructional technology and distance education. In order for distance education to be effective, there must be a concerted effort to understand the role of the learner as well as the instructor. The educational technologist needs to be cognizant of the learning styles as well as the motivation of the distance learner.

Christopher (2004) sums up instructional technology as the pursuit of knowing how people learn and discovering the best method to teach the learner. She describes the components as follows:

- objects—tools, machines, instruments, weapons, appliances—

those physical devices of technical performance,

- knowledge—the know-how behind technological innovation,
- activities—what people do, including their skills, methods, procedures and routines,
- a socio-technical system—the manufacture and use of objects involving people and other objects in combination, and
- a process that begins with a need and ends with a solution.

The simplest definition that can be applied to instructional technology is the application of theory to the design and development of instruction. This places instructional technology in the column of a process instead of a profession or field. The educator who is involved with distance education must be trained in the design and development of instruction for electronic delivery. Educators developing distance education courses should approach course design—curriculum planning, class projects, visual aids, library materials, and student interaction—not in terms of replicating the traditional classroom, but in terms of maximizing the potential of the medium that will be employed (AFT, 2000).

Although most researchers in the field of instructional systems design look to Seels and Richey when defining instructional technology as a profession, a closer look at the Seels and Richey definition does describe a “process.” An argument can be made that the term *instructional technology* basically means the application of the sciences of technology in the design and delivery of instruction. Inherent in this definition is the understanding that “instructional” encompasses all that is involved in the “process” of instruction: being aware that different learners have different learning styles; understanding the processes of the transfer of knowledge, and

how it is different for different learners; being aware of the factors that can have an influence on learning, especially in an online environment; and, having an understanding of the best way to develop the instructional units to best facilitate learning.

In spite of the many efforts to confine instructional technology to the ranks of “professions,” it is hard to ignore the fact that the research and literature about instructional technology evolves around a study of the discipline of infusing the theories of learning into the process of delivering instruction with the support of technology. This would place instructional technology in the “field of study” category. The following is a review of a timeline of the definitions of instructional technology, as outlined on a link from the home page of the Instructional Technology Global Network (2004):

- Ely, 1963: AV Communication is that branch of educational theory and practice concerned with the design and use of messages which control the learning process.
- President’s Commission on IT, 1970: 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 communication and employing a combination of human and non-human resources to bring about more effective instruction.
- AECT, 1972: ET is a complex, integrated process involving people, procedures, ideas, devices and organization for analyzing problems and devising, implementing, evaluating, and managing solutions to those problems involved in all aspects of human learning.
- Davies, 1991: Described the field as a science, art, and craft.

- AECT, 1994: IT is the theory and practice of design, development, utilization, management, and evaluation of processes and resources for learning.

If we base the decision of whether instructional technology is a profession or a field of study solely on the definitions that have been put forward by various "experts," then it appears that it definitely would be classified as a field of study. However, if we consider the individual whose occupation it is to provide instructional technology support, (i.e., the instructional technologist), then it would be a disservice to not classify that individual as belonging to the profession of instructional technology (verbalized as "instructional technologist"). Although it sounds like a play on semantics, it would be prudent to say that instructional technology is a field of study and instructional technologist is a profession.

It is the instructional technologist who has the responsibility to see that emerging technologies are diffused into the instructional development and delivery process. The instructional technologist (the profession) must utilize the theories involved in instructional technology (the field of study) to ensure that instruction is designed and developed in a systematic way, based on behavioral science theory, research, and development (Saetler, as cited in Surry, 1997). In the educational setting, the instructional technologist can increase the efficiency and effectiveness of the educator in meeting the goals of instruction, especially in the area of distance education, where technology plays an ever-increasing role in the design and delivery of instruction.

REFERENCES

- The American Federation of Teachers. (2000). *Guidelines for good practice: Higher Education Program and Policy Council*. Retrieved May 2004, from http://www.aft.org/higher_ed/downloadable/distance.pdf
- The American Journal of Distance Education. (2004). Retrieved May 2004, from <http://www.ajde.com/>
- Christopher, P. (2004). *What is instructional technology? A personal reflection*. Retrieved May, 2004, from <http://www.gsu.edu/~mstsw/courses/it7000/papers/whatis.htm>
- Instructional Technology Global Network. (2004). *Instructional technology timeline*. Retrieved May, 2004 from <http://www.ittheory.com/timelin2.htm>
- Seals, B. B., & Richey, R. C. (1994). *Instructional technology: The definition and domains of the field*. Bloomington, IN: Association for Educational Communications and Technology
- Surry, D. W. (1997). *Diffusion theory and instructional technology*. Paper presented at the Annual Conference of the Association for Educational Communications and Technology. Retrieved May 2004, from <http://www.gsu.edu/~wwwitr/docs/diffusion/>

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