



Effective Application of Instructional Technology to Nonformal Education¹

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Educational technology relates to three major problems inherent in nonformal education: (1) wide variations among learners, (2) quality of teaching, and (3) cost—in terms of effectiveness and efficiency.

Instructional Technology

Technology, as related to the behavioral science base of education, has essentially the same meaning as *engineering* as related to the physical sciences. Educational technology is the systematic application of what is known about teaching and learning to the accomplishment of given educational objectives. Instructional technology encompasses the application of technological devices, but it denotes far more—it is concerned with the entire social and psychological system within which the learning is to be accomplished. Education technology is involved in optimizing all the components of the system in terms of a cost/effective model.

Research in instructional technology is typically concentrated in four categories:

1. System Analysis
Examining an ongoing educational operation or a projected educational plan in order to identify the sub-systems, components, and inter-relationships towards the end of designing or re-designing to increase the system's effectiveness or efficiency.
2. Teacher Behavior
Examining the variables in the human components of the instructional system. (What sorts of teacher behavior have what sorts of consequences in learner behavior?)
3. Media Development, Description, and Experimentation
Examining the instructional potentialities, and the limitations of communication and instructional devices and procedures.
4. Diffusion, Dissemination, and Adoption
Examining the factors that affect rate and probability of movement of procedural ideas and instructional devices from introduction to acceptance and use within a given society, culture, sub-culture or system.

Aside from helping to clarify the issues and identifying the respective consequences of functions within the system, educational technology offers little help in making value-based decisions (particularly in issues of *what* should be taught, to *whom*, and *why*.) But once these decisions have been made, technology can step in to assist in the clarification of objectives, and it can continue throughout the process dealing with matters of *how*, *where*, *using what* to accomplish the given educational objective and, finally, providing procedures and means to assess the results.

¹ Unpublished paper, 1970s. Learning Systems Institute of Education, Human Learning Research Institute, College of Social Science and College of Education, Michigan State University, 1970s

The Problem of Ethno-Pedagogy

In the following propositions and descriptions, a simple distinction must be made to identify the two cultures that constitute a simple cross-cultural problem. “A” is used to indicate the sending culture; “B” designates the receiving culture.

Ethno-pedagogy is the term in current use to identify the study of relationships between culture and style of teaching. In limited contrast with the cross-cultural studies of learning and learner variables, the emphasis is less on comparisons of the “typical learners” in culture A versus culture B. Instead, the emphasis is on the ways in which teaching procedures and styles in a given culture have come about, why they are the way they are, and what influences these styles have on learners in terms of both skills and expectations.

Since the study of nonformal education demands attention to people of various degrees of formal schooling, it is important to study the pedagogic expectations and acceptances within the specific culture—both among the unschooled, in terms of the society’s informal education (socialization) and its means, and among the more schooled, in terms of the effects the accepted modes of pedagogy have had.

Nonformal Education

Much nonformal education is oriented towards specific objectives. From the technological viewpoint, educational operations can be more systematic and precise when their objectives are clearly specified. Thus, although the sprawl and the variety of nonformal educational operations is greater than in formal education, there is greater feasibility of appropriately relating to improvement of nonformal education through technology.

A broad perspective of education, and especially a concept of education as it relates to national development, involves far more than the schooling systems of a country. The non-school functions (commonly called nonformal education) are relatively opportune for enhancement through instructional technology. In that part of nonformal education that is less imbedded in academic tradition and hedged about by vested interests, innovation and development of a systematic sort can progress more easily than in the institutions of formal schooling.

Proposal

We are proposing to relate the series of studies in ethno-pedagogy to the matter of nonformal education as a participation in the university’s focus on research, development, training, and consultation in nonformal education for our own and other nations. In this regard, two chains of studies have important bearing on the matter of the United States’ involvement in nonformal education for national development overseas:

1. Cross-cultural transformation of instructional materials.
2. Identification of factors that make for cross-cultural competency in educators and other international consultants.

Following are the three problem areas in which we propose to engage in research efforts.

Problem 1

What ethno-pedagogic factors differentiate the task of teaching in Culture—from the task in Culture A?

- In what ways are styles and forms of teaching unique to specific cultures and sub-cultures?
- Which features of teaching style are indigenous (traceable to basic cultural characteristics) and which are “imported?”

- What features of teaching style are inseparable from the basic value system of the culture? (Cannot be altered without severe culture-conflict.)
- Which nations or cultural groups are similar, and which are dissimilar in terms of teaching style?

Investigations in this series provide the theoretical base for the developmental aspects of consultative, design, and planning efforts of a cross-cultural sort.

Problem 2

What skills, insights, knowledge, and attitudes are involved in effective cross-cultural teaching and consultation?

- What trainable factors have the most pay-off in terms of making a person from A effective as a teacher (or consultant) of persons in B?
- What can be learned through the experiences of those who have taught in second-culture situations?
- What are the common-denominator factors, if any, which constitute the most versatile and comprehensive cross-cultural competencies?

Investigations in this series have implications for the design of training.