

Where does the difference lie, really, in individual differences? French has developed a matrix to display the learning differences as well as guide teaching strategies.

## teaching strategies and learning processes

by Russell L. French



The philosophy of education is a major interest of Russell French, particularly the communication behavior of both students and teachers. An associate professor at the University of Tennessee and director of the pilot program in teacher education, French has also taught at the Capital University in Columbus, Ohio, and Ohio State University as well as in Cincinnati public schools. He received his Ph.D. from Ohio State University and his bachelor's and master's degrees from the University of Cincinnati.

Teaching is not learning, and learning is not teaching. The two processes are different in nature, and each is controlled by a different individual. Yet, the teacher, while not being able to control the learning process, cannot develop the instructional process (objectives, strategies and activities, measurement, evaluation) without regard to what he/she presumes to be happening within the learner. In order to plan instruction, the teacher must have a personal answer to three crucial questions: "What is instruction? How do people learn? What is significantly different about different learners?" While the teacher's response to the first question is terribly important, in fact, basic to all successful instruction, this paper focuses on some appropriate, practical responses to the latter two questions.

### How Do People Learn?

When an educator approaches the question, "How do people learn?", he is aware that there are different schools of thought regarding the answer. If a teacher has several years of classroom experience, his/her response to the question is probably tempered by that experience. Most experienced teachers are quick to suggest that there may possibly be differences between a child and a rat and between thirty children aggregated and a single rat. The implication is, of course, that learning theory and research leave something to be desired. Whatever the problems existing in learning theory and related research, the individual educator does not have the option of ignoring the question, "How do people learn?" In order to develop or select teaching strategies, methods or techniques, the teacher must have some notion of what he *thinks* will happen in the learning process.

One intriguing model of the learning process is offered by Asahel Woodruff (1951): Figure one presents a simplified version of that model.

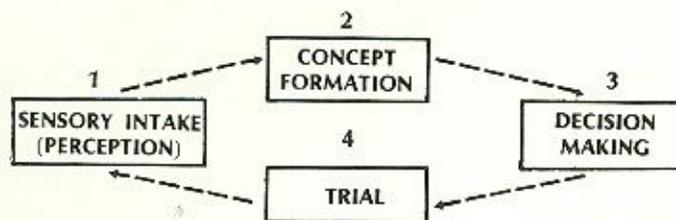


Figure 1. Woodruff's Model of Learning

Stages three and four of Woodruff's model hold particular implications for the development and selection of instructional strategies. If, indeed, the learning process is incomplete without the learner's participation in relevant decision-making and trial experiences appropriate to his decisions, the teacher must employ in the instructional

process strategies which provide such opportunities. Role-play, simulation, critical-incident processes, games and case studies offer a few possible approaches to the instructional problem.

If the teacher views learning as a process different from Woodruff's conceptualization, other issues and problems present themselves. However, the point remains the same. Without personal responses to the question, "How do people learn?", our perspectives on instruction are limited and our practices insufficient.

### What's Different About Different Learners?

A concern for individual differences in learners is nothing new. Indeed, individual differences are mentioned often in the best educational literature. Most educators read and hear and use the term so often that they begin to assume that meaning is inherent in it. Few of us give enough thought to the nature of individual differences and their relationship to instructional methodology.

One way of responding to the question of individual differences is to suggest that every human being has a personal learning style. If this is true, it may mean that the survival of learners in the public schools (particularly at the elementary level) is directly related to the correlation between my teaching strategies and their learning style. Obviously, some conceptual model of learning styles is essential to the teacher engaged in instructional planning and implementation.

This writer's observations of learners at all levels suggest that one might consider learning styles from a sensory-intake point of view. Within this framework, a list of personal learning styles might include:

Style	Characteristic
Print-Oriented	Dependency on reading and writing
Aural	A listener; doesn't say much
Oral (Interactive)	A talker; learns through discussion
Visual	Must have many visual stimuli and visual representations
Tactile	Has to touch everything and everyone
Motor	Has to move about while learning anything
Olfactory	Learns through taste and smell.

There may be combinations of these, thereby forming as yet undefined styles, but most of us can name at least one student who fits into each of the categories listed. Indeed, each of us can probably place ourselves somewhere in this list.

Another view is offered by those who perceive learning styles as:

Style	Characteristic
Sequential	Must perceive orderly relationships (B follows A)
Logical	Uses processes of reasoning to reach conclusions
Intuitive	Perceives truths and facts directly without benefit of extensive reasoning
Spontaneous	Relies on impulse
Open	Uses combinations of the above or different ones of the above at different times.

Probably, neither of these views is wholly right or wholly wrong. Perhaps the assessment of learning style is a matter of diagnosing and locating the learner on a matrix something like that presented in Figure Two.

### Relating Teaching Strategies to Learning Styles

If the notion of learning styles and the specific styles outlined here reflect valid differences among learners, what are the implications for development and selection of teaching strategies? The first obvious conclusion to be drawn is that the teacher must select strategies congruent with the learning styles of those individuals he/she is trying to teach.

	Sequential	Logical	Intuitive	Spontaneous	Open
PRINT-ORIENTED					
AURAL					
ORAL (INTERACTIVE)					
VISUAL					
TACTILE					
MOTOR					
OLFACTORY					

Figure 2. Matrix of Personal Learning Styles

Selection of strategies will have to be based on diagnosis of learning style. Diagnosis can best be accomplished through observation of the learner in a range and variety of experiences. Once diagnosis is accomplished, the match-up of teaching strategy and learning style can proceed in a logical, orderly manner. For example, strategies and techniques deemed most appropriate to sensory-input styles suggested here might be as follows:

Style	Most Appropriate Technique
Print-Oriented	Reading, writing about, book-based discussion
Aural	Lecture, listen to panel discussion, sound film television, audiotape
Oral (Interactive)	Socratic discussion, panel discussion colloquy, dramatization, dialogue, interview, debate, T-group, role play, student verbal presentation, games, student demonstration
Visual	Slides, motion picture, filmstrips, television, still pictures, observer of dramatization, non-verbal exercises, demonstration, trips, exhibits
Motor	Role play, games, action mazes, nonverbal exercises, student demonstration, learning centers
Olfactory	Trips, exhibits, addition of taste and smell experiences to daily activity.

Teaching is not learning, and learning is not teaching. But, teaching strategies cannot be developed or selected in any meaningful fashion unless the teacher draws upon clearly defined concepts of learning process and learning styles.

### REFERENCE

Woodruff, Asahel. *The Psychology of Teaching*. New York: Longmans, Green and Co., 1951.