Learning Types in Education

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Abstract:

*"Teaching" as an activity does not exist: or at least it is meaningless to think about it in isolation. There is always an interaction between the **Teacher,** the **Learner** and the **Subject** being taught.*

This is not a wholly banal point, because;

- *The **Subject** is not neutral: it imposes its own discipline. Early mathematics is linear, for example, because you have to learn to count before you can do anything else. Some other subjects allow you to sequence the curriculum with more freedom.*
- *The **Learner** has her or his own attributes, motivation and baggage, and these may or may not "fit" with the subject and/or the teacher. The Learner is usually also part of a wider class group of **other learners**, which may help or hinder (or indeed be irrelevant to) the learning process.*
- *The **Teacher** too has her or his own values, preferred approach to learning, history of learning the Subject, and level of skill.*
- *All this takes place within a **Context,** which may define the reasons for the teaching-learning (compulsory schooling and the National Curriculum), the desired outcome (expressive, as in "learning for its own sake" or instrumental "I need the qualification for a better job"), and the power relationship between the Teacher and the Learner(s).*

1. Introduction

An educator asks the following questions to himself before he starts the process of teaching and learning.

Who is to learn- child

From whom to learn- teacher, environment

Why to learn- aims of teaching

What to learn- acquisition of knowledge, skills etc.

How to learn- methodology

When to learn- motivation

Where to learn- classroom, play field

The educator tries to find out the answers of all this questions before he will go to start the process of teaching-learning. Because of child is a book, the teacher has to read it from page to page. Here, the author tries to introduce some important types of learning for teacher educators in the field of Education.

2. Simple Non-associative Learning

2.1 Habituation

Psychology, habituation is an example of non-associative learning in which there is a progressive diminution of behavioral response probability with repetition stimulus. An animal first responds to a stimulus, but if it is neither rewarding nor harmful the animal reduces

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subsequent responses. One example of this can be seen in small song birds-if a stuffed owl (or similar predator) is put into the cage, the birds initially react to it as though it were a real predator. Soon the birds react less, showing habituation. If another stuffed owl is introduced (or the same one removed and re-introduced), the birds react to it again as though it were a predator, demonstrating that it is only a very specific stimulus that is habituated to (namely, one particular unmoving owl in one place).

2.2 Sensitization

Sensitization is an example of non-associative learning in which the progressive amplification of a response follows repeated administrations of a stimulus (Bell et al., 1995). An everyday example of this mechanism is the repeated tonic stimulation of peripheral nerves that will occur if a person rubs his arm continuously. After a while, this stimulation will create a warm sensation that will eventually turn painful. The pain is the result of the progressively amplified synaptic response of the peripheral nerves warning the person that the stimulation is harmful. Sensitization is thought to underlie both adaptive as well as maladaptive learning processes in the organism.

2.3 Associative Learning

Associative learning is the process by which an element is taught through association with a separate, pre-occurring element. It is also referred to as classical conditioning. Honeybees display associative learning through the proboscis extension reflex paradigm. Operant conditioning is the use of consequences to modify the occurrence and form of behavior. *Operant conditioning* is distinguished from *Pavlovian conditioning* in that operant conditioning uses reinforcement/punishment to alter an action-outcome association. In contrast Pavlovian conditioning involves strengthening of the stimulus-outcome association.

2.4 Classical Conditioning

The typical paradigm for classical conditioning involves repeatedly pairing an unconditioned stimulus (which unfailingly evokes a reflexive response) with another previously neutral stimulus (which does not normally evoke the response). Following conditioning, the response occurs both to the unconditioned stimulus and to the other, unrelated stimulus (now referred to as the "conditioned stimulus"). The response to the conditioned stimulus is termed a *conditioned response*. The classic example is Pavlov and his dogs. Meat powder naturally will make a dog salivate when it is put into a dog's mouth; salivating is a reflexive response to the meat powder. Meat powder is the unconditioned stimulus (US) and the salivation is the unconditioned response (UR). Then Pavlov rang a bell before presenting the meat powder. The first time Pavlov rang the bell, the neutral stimulus, the dogs did not salivate, but once he put the meat powder in their mouths they began to salivate. After numerous pairings of the bell, and then food the dogs learned that the bell was a signal that the food was about to come and began to salivate just when the bell was rang. Once this occurs the bell becomes the conditioned stimulus (CS) and the salivation to the bell is the conditioned response (CR).

2.5 Imprinting

Imprinting is the term used in psychology and ethnology to describe any kind of phase-sensitive learning (learning occurring at a particular age or a particular life stage) that is rapid and apparently independent of the consequences of behavior. It was first used to describe situations in which an animal or person learns the characteristics of some stimulus, which is therefore said to be "imprinted" onto the subject.

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2.6 Observational Learning
The learning process most characteristic of humans is imitation; one's personal repetition of an observed behavior, such as a dance. Humans can copy three types of information simultaneously: the demonstrator's goals, actions, and environmental outcomes (results, see Emulation (observational learning)). Through copying these types of information, (most) infants will tune into their surrounding culture.

2.7 Play (Activity)
Play generally describes behavior which has no particular end in itself, but improves performance in similar situations in the future. This is seen in a wide variety of vertebrates besides humans, but is mostly limited to mammals and birds. Cats are known to play with a ball of string when young, who gives them experience with catching prey. Besides inanimate objects, animals may play with other members of their own species or other animals, such as orcas playing with seals they have caught. Play involves a significant cost to animals, such as increased vulnerability to predators and the risk of injury and possibly infection. It also consumes energy, so there must be significant benefits associated with play for it to have evolved. Play is generally seen in younger animals, suggesting a link with learning. However, it may also have other benefits not associated directly with learning, for example improving physical fitness.

2.8 Enculturation
Enculturation is the process by which a person learns the requirements of their native culture by which he or she is surrounded, and acquires values and behaviors that are appropriate or necessary in that culture. The influences which as part of this process limit, direct or shape the individual, whether deliberately or not, include parents, other adults, and peers. If successful, enculturation results in competence in the language, values and rituals of the culture. (Compare acculturation, where a person is within a culture different to their normal culture, and learns the requirements of this different culture).

2.9 Multimedia Learning
Multimedia learning is where a person uses both auditory and visual stimuli to learn information (Mayer 2001). This type of learning relies on dual-coding theory (Paivio 1971).

2.10 E-learning and Augmented Learning
Electronic learning or e-learning is a general term used to refer to Internet-based networked computer-enhanced learning. A specific and always more diffused e-learning is mobile learning (m-learning), which uses different mobile telecommunication equipment, such as cellular phones. When a learner interacts with the e-learning environment, it's called augmented learning. By adapting to the needs of individuals, the context-driven instruction can be dynamically tailored to the learner's natural environment. Augmented digital content may include text, images, video, audio (music and voice). By personalizing instruction, augmented learning has been shown to improve learning performance for a lifetime.

2.11 Rote Learning
Rote learning is a technique which avoids understanding the inner complexities and inferences of the subject that is being learned and instead focuses on memorizing the material so that it can be recalled by the learner exactly the way it was read or heard. The major practice involved in rote learning techniques is *learning by repetition*, based on the idea that one will be able to quickly recall the meaning of the material the more it is repeated. Rote learning is used in

diverse areas, from mathematics to music to religion. Although it has been criticized by some schools of thought, rote learning is a necessity in many situations.

2.12 Informal Learning
Informal learning occurs through the experience of day-to-day situations (for example, one would learn to look ahead while walking because of the danger inherent in not paying attention to where one is going). It is learning from life, during a meal at table with parents, play, exploring, etc.

2.13 Formal Learning
A depiction of the world's oldest continually operating university, the University of Bologna, Italy Formal learning is learning that takes place within a teacher-student relationship, such as in a school system.

3. Non formal learning
Non formal learning is organized learning outside the formal learning system. For example: learning by coming together with people with similar interests and exchanging viewpoints, in clubs or in (international) youth organizations, workshops.

3.1 Dialogic Learning
Dialogic learning is a type of learning based on dialogue.
3.1.1 Domains of Learning
Dr. Benjamin Bloom has suggested three domains of learning:
- Cognitive – To recall, calculate, discuss, analyze, problem solve, etc.
- Psychomotor – To dance, swim, ski, dive, drive a car, ride a bike, etc.
- Affective – To like something or someone, love, appreciate, fear, hate, worship, etc.

These domains are not mutually exclusive. For example, in learning to play chess, the person will have to learn the rules of the game (cognitive domain); but he also has to learn how to set up the chess pieces on the chessboard and also how to properly hold and move a chess piece (psychomotor). Furthermore, later in the game the person may even learn to love the game itself, value its applications in life, and appreciate its history (affective domain).

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