

Interpretation on the Different Theories of Learning Used In Teaching English as a Foreign Language

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ABSTRACT

This section gives a summary or outline and interpretation on the theories of learning in English as a Foreign Language. The following theories of learning are actually used by the teacher in teaching.

KEYWORDS

Theories of Learning, Theories of Learning in Teaching English, Strategies in Teaching English

INTRODUCTION

A cognitive theory of multimedia learning based on three main assumptions: there are two separate channels for processing information; there is limited channel capacity; and that learning is an active process of filtering, selecting, organizing, and integrating information. Proponents of PBL believe that, as a strategy, it: develops critical thinking and creative skills improve problem-solving skills increases motivation helps students learn to transfer knowledge to new situations. Experiential learning a four-stage cyclical theory of learning, Kolb's experiential learning theory is a holistic perspective that combines experience, perception, cognition, and behaviour.

Discovery Learning is a method of inquiry-based instruction; discovery learning believes that it is best for learners to discover facts and relationships for themselves. Situated Learning Theory posits that learning is unintentional and situated within authentic activity, context, and culture. In contrast with most classrooms learning activities that involve abstract

knowledge which is and out of context, Lave argues that learning is situated; that is, as it normally occurs, learning is embedded within activity, context and culture.

FINDINGS AND DISCUSSIONS

A. Cognitive Theory of Multimedia Learning (Mayer)

Outline/Summary: A cognitive theory of multimedia learning based on three main assumptions: there are two separate channels (auditory and visual) for processing information; there is limited channel capacity; and that learning is an active process of filtering, selecting, organizing, and integrating information.

Cognitive Theory of Multimedia Learning (Mayer)

The principle known as the “multimedia principle” states that “people learn more deeply from words and pictures than from words alone” However, simply adding words to pictures is not an effective way to achieve multimedia learning. The goal is to instructional media in the light of



how human mind works. This is the basis for Mayer's cognitive theory of multimedia learning. This theory proposes three main assumptions when it comes to learning with multimedia:

1. There are two separate channels (auditory and visual) for processing information (sometimes referred to as Dual-Coding theory);
2. Each channel has a limited (finite) capacity (similar to Sweller's notion of Cognitive Load);
3. Learning is an active process of filtering, selecting, organizing, and integrating information based upon prior knowledge.

Humans can only process a finite amount of information in a channel at a time, and they make sense of incoming information by actively creating mental representations. Mayer also discusses the role of three memory stores: sensory (which receives stimuli and stores it for a very short time), working (where we actively process information to create mental constructs (or 'schema'), and long-term (the repository of all things learned).

Mayer's cognitive theory of multimedia learning presents the idea that the brain does not interpret a multimedia presentation of words, pictures, and auditory information in a mutually exclusive fashion; rather, these elements are selected and organized dynamically to produce logical mental constructs. Furthermore, Mayer underscores the importance of learning (based upon the testing of content and demonstrating the successful transfer of knowledge) when new information is integrated with prior knowledge. Design principles including providing coherent verbal, pictorial information, guiding the learners to select relevant words

and images, and reducing the load for a single processing channel etc. can be entailed from this theory.

B. Problem-Based Learning (PBL)

Problem-Based Learning (PBL) is an instructional method of hands-on, active learning centered on the investigation and resolution of messy, real-world problems.

Problem-Based Learning (PBL)

Problem-Based Learning (PBL) is a pedagogical approach and curriculum design methodology often used in higher education and K-12 settings. The following are some of the defining characteristics of PBL:

- Learning is driven by challenging, open-ended problems with no one "right" answer
- Problems/cases are context specific
- Students work as self-directed, active investigators and problem-solvers in small collaborative groups (typically of about five students)
- A key problem is identified and a solution is agreed upon and implemented
- Teachers adopt the role as facilitators of learning, guiding the learning process and promoting an environment of inquiry

Rather than having a teacher provide facts and then testing students' ability to recall these facts via memorization, PBL attempts to get students to apply knowledge to new situations. Students are faced with contextualized, ill-structured problems and are asked to investigate and discover meaningful solutions. Proponents of PBL believe that, as a strategy, it:



- develops critical thinking and creative skills
- improves problem-solving skills
- increases motivation
- helps students learn to transfer knowledge to new situations

C. Experiential Learning (Kolb)

A four-stage cyclical theory of learning, Kolb's experiential learning theory is a holistic perspective that combines experience, perception, cognition, and behavior.

Experiential Learning (Kolb)

Building upon earlier work by John Dewey and Kurt Levin, American educational theorist David A. Kolb believes "learning is the process whereby knowledge is created through the transformation of experience". The theory presents a cyclical model of learning, consisting of four stages shown below. One may begin at any stage, but must follow each other in the sequence:

- concrete experience (or "DO")
- reflective observation (or "OBSERVE")
- abstract conceptualization (or "THINK")
- active experimentation (or "PLAN")

Kolb's four-stage learning cycle shows how experience is translated through reflection into concepts, which in turn are used as guides for active experimentation and the choice of new experiences.

- The first stage, *concrete experience* (CE), is where the learner actively experiences an activity such as a lab session or field work.

- The second stage, *reflective observation* (RO), is when the learner consciously reflects back on that experience.

- The third stage, *abstract conceptualization* (AC), is where the learner attempts to conceptualize a theory or model of what is observed.

- The fourth stage, *active experimentation* (AE), is where the learner is trying to plan how to test a model or theory or plan for a forthcoming experience.

Kolb identified four learning styles which correspond to these stages. The styles highlight conditions under which learners learn better. These styles are:

- assimilators, who learn better when presented with sound logical theories to consider
- convergers, who learn better when provided with practical applications of concepts and theories
- accommodators, who learn better when provided with "hands-on" experiences
- divergers, who learn better when allowed to observe and collect a wide range of information

D. Discovery Learning (Bruner)

Discovery Learning is a method of inquiry-based instruction; discovery learning believes that it is best for learners to discover facts and relationships for themselves.

Discovery Learning (Bruner)

Discovery learning is an inquiry-based, constructivist learning theory that takes



place in problem solving situations where the learner draws on his or her own past experience and existing knowledge to discover facts and relationships and new truths to be learned.

Students interact with the world by exploring and manipulating objects, wrestling with questions and controversies, or performing experiments. As a result, students may be more likely to remember concepts and knowledge discovered on their own (in contrast to a transmissionist model).

Models that are based upon discovery learning model include: guided discovery, problem-based learning, simulation-based learning, case-based learning, incidental learning, among others.

Proponents of this theory believe that discovery learning has many advantages, including:

- encourages active engagement
- promotes motivation
- promotes autonomy, responsibility, independence
- the development of creativity and problem solving skills.
- a tailored learning experience

E. Situated Learning Theory (Lave)

Summary: Situated Learning Theory posits that learning is unintentional and situated within authentic activity, context, and culture.

Situated Learning Theory (Lave)

In contrast with most classrooms learning activities that involve abstract

knowledge which is and out of context, Lave argues that learning is situated; that is, as it normally occurs, learning is embedded within activity, context and culture.

It is also usually unintentional rather than deliberate. Lave and Wenger (1991) call this a process of “legitimate peripheral participation.”

Knowledge needs to be presented in authentic contexts — settings and situations that would normally involve that knowledge. Social interaction and collaboration are essential components of situated learning — learners become involved in a “community of practice” which embodies certain beliefs and behaviors to be acquired. As the beginner or novice moves from the periphery of a community to its center, he or she becomes more active and engaged within the culture and eventually assumes the role of an expert.

Other researchers have further developed Situated Learning theory. Brown, emphasize the idea of cognitive apprenticeship: “Cognitive apprenticeship supports learning in a domain by enabling students to acquire, develop and use cognitive tools in authentic domain activity. Learning, both outside and inside school, advances through collaborative social interaction and the social construction of knowledge.”

F. Multiple Intelligences Theory (Gardner)

Multiple Intelligences Theory posits that there are seven ways people understand in the world, described by Gardner as seven *intelligences*.

Key Terms: Linguistic, Logical-Mathematical, Visual-Spatial, Body-Kinesthetic, Musical-Rhythmic, Interpersonal, Intrapersonal.



Multiple Intelligences Theory

Developed by Harvard psychologist Howard Gardner in 1983 and subsequently refined, this theory states there are at least seven ways ("intelligences") that people understand and perceive the world. These intelligences may not be exhaustive. Gardner lists the following:

- Linguistic. The ability to use spoken or written words.
- Logical-Mathematical. Inductive and deductive thinking and reasoning abilities, logic, as well as the use of numbers and abstract pattern recognition.
- Visual-Spatial. The ability to mentally visualize objects and spatial dimensions.
- Body-Kinesthetic. The wisdom of the body and the ability to control physical motion
- Musical-Rhythmic. The ability to master music as well as rhythms, tones and beats.
- Interpersonal. The ability to communicate effectively with other people and to be able to develop relationships.
- Intrapersonal. The ability to understand one's own emotions, motivations, inner states of being, and self-reflection.

This theory, while widely popular over the last two decades, has its share of critics. Some argue that Gardner's theory is based too much on his own intuition rather than empirical data. Others feel that the intelligences are synonymous for personality types.

Implications for Classrooms

The verbal-linguistic and logical-mathematical intelligences are the ones

most frequently used in traditional school curricula. A more balanced curriculum that incorporates the arts, self-awareness, communication, and physical education may be useful in order to leverage the intelligences that some students may have.

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