

Learning the Learners

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Received on 03.07.2019; **Accepted on** 16.08.2019

How to cite this article:

Poornima R, Ashok L, Sujatha GP. Learning the Learners. Indian J Dent Educ. 2019;12(3):91-95.

Abstract

Learning styles are the individual instincts which influence how a person acquires 'knowledge-skill-attitude'. It has been scientifically proved that not every individual learns in the same manner. Depending on many factors such as attention, motivation and emotions as well as by learner characteristics like prior knowledge, understanding and learning styles and intellectual capabilities. This paper highlights the different kinds of learners and what are the existing learning types, so that we have mentors will be able to deliver the intended information for the betterment of the learners.

Keywords: Learning style; Learner; Learners style; Adult learning.

Introduction

Every individual has his own preferred way of learning when compared to others, therefore it is vital to the trainers and educators to understand various styles of learning so that they will be able to engage effectively in transferring knowledge and skills.

In adult learning theory, several approaches to learning style have been accepted. These include learning styles based on the senses that are involved in processing information; theories of intelligence, including emotional intelligence and 'multiple intelligences'; and preferences for

learning conditions, i.e., the environment in which learning takes place. There seems to be lacunar space between what a learner needs to be able to do (desired state) and where the learner is now (the current state) which is the "learning gap". The primary goal for any instruction is for the learner to move from his/her current state to the desired state.

Let's now explore the types of gaps our learners face, as well as the desired skills, our learners should possess (desired state), but don't possess now (current state). In our target audience of learners, the current and desired state (hence, learning gaps) for our adult learners vary widely (Fig. 1)



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Fig. 1: Different states of learning gap

The list of possible types of gaps a learner may be faced¹: (Fig. 2)

- **Knowledge Gaps:** Think about the information a learner needs to be successful in tackling a new problem or task. When and how is this information used?
- **Skills Gaps:** While information is necessary to overcome learning gaps, it is not sufficient to overcome a skill gap. Additional supports and practice are needed to be able to perform a new task successfully.
- **Motivation Gap:** Along with knowledge and skills gaps, you may need to consider attitude and resistance issues the learner faces, such as anxiety, other work and home distractions, or lack of interest.
- **Environment Gap:** There are a surprising number of potential environmental roadblocks for adult learners. Where do they study? Does getting to class involve a long commute? Do they have the right tools and resources? Do they have enough time, childcare, or transportation to take classes?
- **Communication Gap:** At times, the biggest gap is not knowledge, skill, or motivation. Instead the learning gap may be rooted

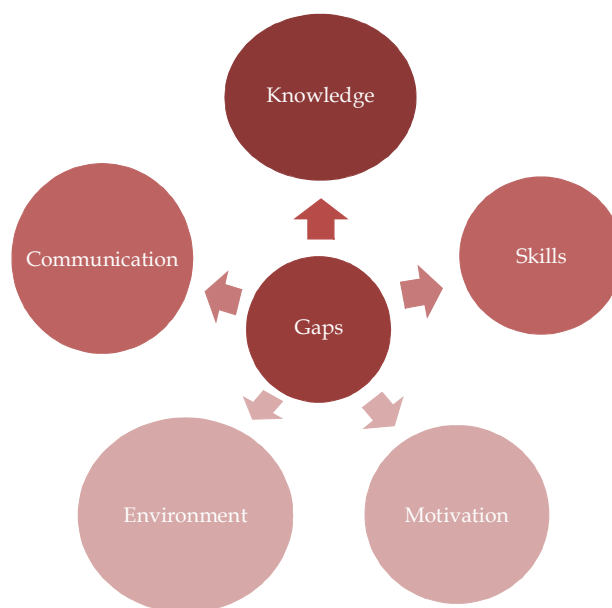


Fig. 2: Types of gaps faced by a learner

in miscommunication of messages (e.g., directions) between the instruction (or instructor) and the learner.

To be effective in teaching adults, it's important to know your audience and have a general understanding of how adults learn and to address all the above gaps.

Rationale for Understanding the Learning Styles

Learning style is basically behavioural approach to learning experience and they are influential in the learning and achievement of learners.^{2,3}

Understanding learning styles mean:

1. The students will be able to diagnose the need of learning process.
2. The trainers will be able to consider as the foundation for better interaction.
3. It is possible to build strategies for accommodating learning styles.
4. It will allow to prepare student involvement in learning process.
5. It will allow the students to group as per their learning preferences.

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Visual, Kinesthetic and Auditory Learners

Most often people prefer auditory or visual input; however, some people have a preference for kinesthetic learning. A preference for one type of learning over another may be seen in the following ways: (Fig. 3).



Visual
learn what they see



Kinesthetic
learn what they do



Auditory
learn what they hear

Fig. 3 Three types of Learners

Learning style is defined as "Specific behavioral pattern an individual displays in learning" (Campbell *et al.*, 1996).⁵ Dunn defines it as a new way how new information is acquired by individual to develop new skills (1999).⁶ Kolb (1984) defined

- **Visual learners** prefer, enjoy, or require: Graphic illustrations to explain data; color codes to highlight salient information; written material to study new concepts; wall charts that display points to be remembered; written outlines; drawings or designs to illustrate overhead presentations; sitting "up close" in a presentation in order to see the presenter's face, gestures, or visuals; taking notes during a lecture; instructors to repeat verbal directions.
- **Kinesthetic learners** prefer, enjoy, or require: Movement, such as rocking or shaking a leg during a lecture; hands-on experience to learn a task; gestures while making a point; role play exercises over discussion groups; shaking hands when meeting or greeting people; trying new things without a lengthy explanation of the activity; frequent breaks; regular opportunities to change seating or room arrangement; "just doing it" rather than talking about it.
- **Auditory learners** prefer, enjoy, or require: A verbal presentation of new information, such as a lecture; group discussions to hear other points of view or practices; fast-paced verbal exchanges of ideas; a good joke or story that they can repeat for others; verbal cues or mnemonic devices to help them remember information; music at the beginning or during transitions in a training setting; words to accompany a cartoon; oral reports of working groups.

it as a process where an individual retain new information and skills. Kolb's theory of learning styles states that knowledge is created through transformation of experiences.³

Kolb (1984)³ developed his model of Learning

Style Inventory based on the Experiential Learning Theory where he outlined two related approaches toward grasping experience. They are Concrete Experience and Abstract Conceptualization. The other approach is related to transforming experience. They are Reflective Observation and Active Experimentation. All four approaches can be

useful depending on the situations and the resulting learning styles are combinations of the individual's preferred approaches. The four learning styles available in Kolb's model are converger, diverger, assimilator and accommodator (Kolb,1984).

The characteristics of the four learning styles and the best delivery method are given in Table 1.³

Table 1: Kolb's Learning Styles

Kolb's Learning Styles	Characteristics	Delivery Mode
Converger	They are abstract conceptualization and active experimentation. Thus they will be able to make practical application of ideas by deductive reasoning. They are also good problem solvers.	Small- group discussion and classroom participation dislike lectures. They are not risk takers. Thus they prefer data-based programs and prefer computer based learning.
Diverger	They are good at concrete experience and reflective observation. Therefore, they tend to be imaginative and provide innovative ideas.	Traditional classroom based delivery that comprises of brainstorming sessions, reflective activities, lectures and rhetorical questions.
Assimilator	This group uses abstract conceptualization and reflective observation. They are good at using inductive reasoning. They are "private learners".	Prefer print-based delivery ⁷
Accommodator	This group of learners tends to use concrete experience and active experimentation. They are good at actually doing the things.	Like experiment. So could use hands-on computer-based simulation games, online group works, role play games and observations. They prefer computer based delivery mode. ^{2,8}

Table 2: Honey and Mumford's Learning Style Characteristics and Activities

Honey and Mumford	Learning Style Characteristics	Activities
Activist	Learn by doing and participation	<ul style="list-style-type: none"> • brainstorming • problem-solving • group discussion • puzzles • competitions • role-play
Reflector	Learn by watching others and think before act	<ul style="list-style-type: none"> • models • statistics • stories • quotes • background information • applying theories
Theorist	Learn by understanding theory very clearly	<ul style="list-style-type: none"> • time to think about how to apply learning in reality • case studies • problem-solving • discussion
Pragmatist	Learn through practical tips and techniques from experienced person	<ul style="list-style-type: none"> • paired discussions • self-analysis questionnaires • personality questionnaires • time out • observing activities • feedback from others • coaching • interviews (Cano-Garcia & Hughes, 2000)¹²

The other researched models are developed by Honey and Mumford (1986)⁹, Fleming (1995)⁴, Buch and Bartley (2002)¹⁰, Lum *et al.* (2011)¹¹ keeping Kolb's Model as basis. Based on the learning style a widely used Learning style questionnaire (LSQ) is given by Honey and Mumford 1986.⁹ This questionnaire was developed as self-development tool. The completion of the question will help on strengthening the underutilized styles so that everyday learning experience can be enhanced (Table 2).

These were the commonly used researches used for learning styles characteristics and the methods of learning. Understanding what is the students learning style can help the student and their mentor to find techniques for better understanding.

Conclusion

Understanding learning styles helps the educators and the mentors to deliver relevant materials in a tailor-made fashion. This will create an enthusiasm and motivation among the learners to learn and practice what they have learned. The researches on development of novel learning styles of learning has urged the trainers and educational institution to plan the delivery of teaching or training as per the trainees' need than the trainers' convenience.

This paper emphasizes the fact that the learners are having different types of learning styles and there is a need to look into their various learning styles before preparing the curriculum and training materials. Tackle the learner and his/her learning style it is going to take the process of learning to higher strata.

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