

## Learning with a Style: The Role of Learning Styles and Models in Academic Success

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### Abstract:

*The researchers have carried out an extensive review of research on learning styles to develop understanding of the main learning styles with their associated models and theorists. The paper studies the primary learning personality types which offer insights for the educationists and theorists to transform the approach to pedagogy by contextualizing the taught. The learners show strengths for varying sensory modalities and adapt themselves to an individual or a mix of learning approaches with the passage of time. The researchers discuss the implications of these learning styles and models for the teaching and learning to suggest if the teaching community frames into view the particular type of students with respect to their learning habits and preferences, learning can improve and a shift may take place in teaching practices to differentiated pedagogy vis-a-vis differentiated learners. The critical review of learning style and models is likely to benefit the classroom practitioners, policymakers and research community.*

**Key words:** learning styles, learning models, differentiated learners, pedagogy, learning preferences

### 1. INTRODUCTION

Teaching and learning practices invite very carefully constructed theoretical stance to guide the various learning style models. The present paper aims at reviewing the learning

styles from the perspective of differentiated learners, and developing understanding on the interlinked constructs of pedagogy, learning models, and learning preferences for the advancement of better education and creation of conducive, congenial learning environment, and differentiated instruction. The learning styles are numerous and specified for the differentiated learners keeping in view the relation between their cognitive style and learning styles, important in the educational practice. It is important to explain that the learners evolve their learning strategies out of their cognitive styles and learned behaviors.

## **2. REVIEW OF LEARNING MODELS AND STYLES**

Learning styles have been defined in a variety of ways [1, 2] on the basis of differentiated learners categorized for their learning preferences, strategies and orientation like there are some kinesthetic learners who make use of aural-visual faculties [3] other only feel comfortable with visual and verbal texts [4]. Some comprehend texts through intuition and analysis [5] and other reflect and think pragmatically [6].

The learning models informed by various theories are also based on individuals' differentiated learning styles based on disability [7, 8], race [9, 10] and gender [11, 12]. Hence, it is also significant for the educators to know the difference styles of first language learner and ESL learner, and identify the effect of gender and race intersectionality or other influential possible factors in determining the learners' differentiation, behavior and preferences in the classroom [9, 10, 13, 14, 15].

The present review explores the intricate relationship between the teacher and the ways of teaching, and the learner and the style of learning – the building blocks of teaching and learning. It is important for teachers to identify and know their students and their learning styles as the familiarity would inform their pedagogical practices and enhance the performance of the learners [16]. It is significant for teachers to

find out the “distinctive human strengths” to use “them as a basis for engagement and learning” [17].

The researches have supported the correlation between academic success and an individual’s learning style dependent on his or her personality type, motivation level, measure of intellect, recognition and memory, career choice, time spent in studying, academic environment, reading speed and accuracy scores [18, 19, 20, 21, 22, 23]. Learners who are motivated enough to actively participate and positively engage themselves in the learning process are likely to achieve learning outcomes and improve upon their learning through the positive use of technology and classroom activities informed by learning theories and their subsequent ways of learning [24, 25, 26, 27].

The present paper reviews and delimits itself to the influential learning styles in order to develop the theoretical understanding of them for the academia and fellow researchers while leaving out the modes of assessment and the debate of their reliability and validity [28, 29, 30], and criticism on the question of their evidence, efficacy, reliability, applicability and usage, and the controversy of appropriate instructional method matching a particular learning style [31, 32, 33, 34, 35].

There are numerous models available. However, the popular models of learning are: David Kolb's model, Honey and Mumford's model, Barbe, Swassing, and Milone’s VAK Learning modalities, Fleming's VARK model, The Myers-Briggs Model and Anthony Gregorc's model.

Kolb's model is derived from his experiential learning model that integrates “experience, perception, cognition, behavior” and is informed by the works of Dewey, Lewin, and Piaget, [36]. According to him, a learner usually needs to demonstrate and develop respective abilities for the four basic styles of learning according to the situational demands. These four learning approaches, usually employed by a learner, are concrete experience [CE], abstract conceptualization [AC], reflective observation [RO] and active

experimentation [AE]. Thus, learning is a continuous process based on the resolution of opposing experiences with the environment [36].

The learner's interaction and transaction between the person and the environment for the creation and transformation of knowledge results into his or her adaptation to the world. Kolb's learning approaches provide the basis for the Honey and Mumford's concept of learning [37]. It informs that the learners invariably adapt themselves to one of the four different styles. They may be activists, reflectors, theorists, or pragmatists [6]. The learners are activists who "learn by doing," reflectors who "stand back and observe," theorists who "adapt and integrate all of their observations into frameworks," and pragmatists who "seek out and make use of new ideas" [27]. The focus is to create awareness among the learners to identify their style to maximize their learning outcomes.

Barbe, Swassing, and Milone proposed three sensory learning modalities— Visual, Auditory and Kinesthetic [VAK] for the learners [38]. The learners vary in strength with respect to one particular modality or mix of these modalities and integrate with the person. The modality strength may shift in favor of other modalities because of personal preferences, and even can be improved with practice, instruction and age [39].

Fleming [2016] improved this VAK model by introducing and including the modality of Read/write into his VARK model—Visual, Aural / Auditory, Read/write, and Kinesthetic [40]. Since the learners have the ability to apply all the approaches at the same time therefore they become multimodal depending upon context specificities. Application of this model also substantiates that learning through multiple modalities could satisfy the differentiated patterns of the learners [41, 42, 43]

For a better understanding of learning styles, identifying the personality type of a learner is regarded important by the psychologists since they have drawn a very

strong correlation between personality type and learning styles. The Myers-Briggs Model, a case in point, has been informed by Carl Jung and categorized individuals into extroverts who like to try things out in the outside world, introverts who engage themselves within, and live in the world of ideas, sensors who are factual and practical, intuitors who are imaginative, thinkers who like to question and respond logically, feelers who takes insights from personal and humanistic feelings, judges who have certain set agendas, and perceivers who are adaptable to the new situations and are alert to the changing circumstances [44, 45]. A learner can be either one from the given categories or a combination of the classification though one category remains dominant in the personality. These learning styles are guided by the learner's "interests, needs, values and motivation [46] and can help in defining the possibility of in choosing specific professions [47].

Butler and Gregorc evolved model on different learning styles and strengths in learners differentiated on the basis how they vary in the acquisition and process of information [48]. Gregorc also associated phenomenological perspective with the individual learning styles to understand the "underlying psychological forces," and "gain knowledge about ourselves as complex, integrated, holistic, and meaning-seeking human beings" to understand the human impact on the world, and the effect of environment and outside world on the human activities and lives [49]. Gregorc, thus, takes into consideration the complexity of human psychology for the holistic learning of a learner from the perspective of his or her situatedness.

### **3. CONCLUSION**

The researchers have reviewed the learning styles which are differentiated on the basis of experiential learning, sensory modalities, personality type, and the acquisition and the process of information obtained as a result of human interaction with the outside world. The learning preferences

and styles inform the pedagogical methods, instructional strategies, learning orientation, classroom practices and hence, help in improving the academic success of the students and their leaning abilities, and the professional success of teachers and their teaching approach to the effect of overall betterment of the educational system with the desired learning outcomes.

These learning styles help the policy makers in identifying and bridging up the gap between learning theories, way of learning and practices for the development of the learners, differentiated instruction and transformation of knowledge in the classroom in particular, and in the academia overall.

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