

Learning Styles and Second Language Acquisition: A Review of Influences, Factors, and Educational Implication

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Abstract. Academia and the public have focused on studies of learning styles in second language acquisition in recent years. Students' cultural backgrounds can reveal how education and culture affect learning. This paper summarizes the definition and the classification of learning styles and lists a brief review of influence, factors, and educational implications related to learning styles in the field of second language acquisition. The researchers analyzed learning styles are variable and numerous factors affect academic success. Studies show the beneficial correlation between learning styles and academic achievement within an appropriate teaching environment. A strong association exists between an effective learning style and favorable language learning results in students. Simultaneously, variables such as the learners' native language background and their personal traits will impact the selection of their specific learning style. There is a correlation between the variety of learning styles among students and the teaching techniques and aims of teachers in the field of education. An in-depth understanding of students' learning patterns will facilitate the advancement of the teaching profession. Since current evaluations and methods for evaluating students' learning types are questioned, more trustworthy learning style assessments must be developed in future studies.

Keywords: Learning styles; second language learning; second language acquisition.

1. Introduction

Both education and educational psychology place a significant amount of emphasis on the concept of learning styles. The American researcher Herbert Thelen was the first person to propose the phrase "learning style" in 1954. The concept quickly gained widespread attention and acquired productive study findings, demonstrating the broad scope and tremendous potential of learning style research [1]. Since research on learning styles is often conducted within a particular cultural context, it is still debatable whether the results can be generalized to learners from various cultural backgrounds. Some researchers are of the opinion that one's educational upbringing and cultural background both have an impact on their preferred learning method and that students who come from various cultural backgrounds may have distinct preferences. At the same time, many studies have investigated the effect of students' preferred learning styles on their academic achievement, however, the notion that preferred learning styles directly affect academic performance is met with skepticism and debate. There is, according to the findings of several research, a favorable association between the learning style and the level of academic accomplishment when the classroom setting is acceptable [2]. Students have an easier time comprehending the material and retaining it, which ultimately leads to an improvement in their academic performance when the instructional strategy can be tailored to the preferred mode of learning of the students. Conversely, findings from other experiments suggest that the impact of learning styles on academic achievement may be quite insignificant. The pupils' learning styles are only one of the many aspects that go into determining their academic achievement. The academic success of students is also significantly influenced by a variety of other aspects, including their level of motivation and self-confidence, as well as the tactics they use to study. Therefore, the concept of the effect of learning style on academic achievement needs to be seen as an interactive process that ought to take into consideration other elements that are relevant.

This study aims to make a comprehensive review of the definition and classification of learning styles, investigate the impact of learning styles in the field of second language acquisition on the efficiency with which students learn, and investigate the factors that influence students' preferences

regarding learning styles when it comes to acquiring a second language. In the context of the subject of English instruction, the purpose of this work is to investigate the extent to which earlier studies on learning styles have had an impact and the educational value of those findings. In the meantime, it is possible that this work may give evidence for future research on educational practices and language acquisition.

2. The Definition and Classifications of Learning Styles

Learning styles can be characterized as a thoughtful examination and practical implementation of strategies within the learning process. Learning styles are an assortment of cognitive, emotional, and physiological variables that operate as constant markers of the way a learner sees, interacts with, and reacts to the learning environment. Keefe describes learning styles as a combination of these elements. [3]. Kinsella, in Kinsella, from the point of view of the processing of information, the term “learning style” is defined as “learning style refers to the natural habits of the individual learners in the process of receiving information and processing information, and these preferences have a certain persistence, everyone has their own learning style [4].”

Research on learning styles aims to get a deeper understanding of the learning preferences and characteristics of students to provide those students with more efficient learning aids and instructional strategies [5].

In the 1970s, the concept that every person has their own distinctive approach to learning began to gain general acceptance. Since then, academics have created a wide variety of theories and models of different learning styles. Different individuals absorb and utilize knowledge in different approaches shows the concept of learning styles postulates, and it suggests these variations may have an influence on how people perceive, think, feel, and behave. Specifically, the theory proposes that different people take in and process information in multiple ways.

David Kolb is credited with the development of the concept of experiential learning, which postulates that students make use of a variety of learning styles and abilities depending on the circumstances [6]. Learners can choose from four distinct approaches to study: those that emphasize concrete experience (CE), reflective observation (RO), abstract conceptualization (AC), and active experimentation (AE). These models show how several forms of learning property rub up against one another.

Subsequently, a surge of enthusiasm for the notion of learning styles occurred, and the assessment of learners’ preferences and tendencies in relation to learning became not only a point of reference but also a need in the realm of education. Honey and Mumford proposed a paradigm for classifying learners according to their preferred learning styles [7]. According to this model, students may be classified as either Activists, Reflectors, Theorists, or Pragmatists. Each kind denotes a particular approach to learning as well as a mode of operation. If a teacher adopts a teaching approach that is more popular among their students, there is an expectation that students will acquire knowledge more quickly and easily.

Anthony Gregorc and Kathleen Butler go into further depth on how learners think and how it influences how they learn [8]. According to Anthony Gregorc's Mind Styles hypothesis, there is a continuum between individuals who are more concrete and those who are more abstract, as well as between those who think sequentially and those who think randomly. Stochastic methods are non-linear and unpredictable, while sequential thinking organizes facts in a predictable, linear form. According to Gregorc’s concept, the strengths, and the weaknesses of learners in each of these areas establish their distinct learning styles.

The categorization of different approaches to learning takes into account a vast array of varying factors and conceptual frameworks. Together with his colleagues, Visual, auditory, and kinesthetic (which includes movement and touch) are the three "modalities" of learning described by Walter Burke Barbe. In common usage, they are abbreviated as “VAK” [9]. Visual learners, auditory learners, Reading/Writing learners, and kinesthetic learners (VARK) is a variant of the acronym originally

proposed by Neil D. Fleming [10]. Learners who prefer to acquire information via observing the examples and reading books are known as visual learners. Aural learners prefer to learn by hearing and listening, and kinesthetic learners prefer to expand their comprehension of knowledge via practice and experience.

3. Previous Research on Learning Styles in Second Language Acquisition

Students' ability to learn may be influenced by their preferred learning method. Researchers within the subject matter of education have long been curious about how students' individual learning preferences affect their academic performance. Research in the past decades has shown that learning style and students' academic performance and the influence of learning style on students' learning effect has been an important topic in education research.

It's essential to keep in mind though, that students' ability to learn is impacted by an array of purposes, including their preferred learning approach, and it is also affected by many other factors, such as individual motivation, subject characteristics, and teaching environment. In the field of teaching environment, when an instructor's chosen style differs from that of the pupils, learning can be difficult and disappointing [11]. Therefore, understanding a student's learning style is an important aspect of improving teaching effectiveness, but it is not the only consideration.

To sum up, teachers may boost their students' overall performance in the classroom by catering to their individual learning preferences using a wide range of pedagogical approaches and materials.

3.1. Learning Styles Influencing Students' Effectiveness

Melani et al. find learning styles have a statistically significant effect on student achievement [12]. According to their findings, a student's mindset directly affects how well they do in the classroom. Students who are already performing at a high-level need to employ a learning style even more so that they can reach their full academic potential. Among learning preferences, Kinesthetic has the highest positive impact on students' average scores. This learning preference result is also found in Reid's and Chermahini's research [13, 14]. It proves that most students like to learn new knowledge by doing exercises in real situations, which can also be explained by students' behavior habits: most students prefer to do something reality-oriented.

Ellis holds the idea that there are differences in learning styles between the two learners [2]. For example, one learner may be more inclined to visual learning, while another may be more inclined to auditory learning. Furthermore, the learner's academic performance and acquisition are observed and compared. Some students perform better when they choose the learning style that matches their preference, while others perform better in the opposite condition.

Moenikia finds some learning styles are associated with better language learning outcomes, while others may be associated with lower language learning outcomes [15]. Listening, writing, organizing, and reading are the four areas where students with diverse learning styles differ from one another. Therefore, students with verbal learning styles excel in oral communication, students with verbal and social learning styles excel in written composition, students with social learning styles excel in structural understanding, and students with both verbal and social learning styles excel in reading comprehension.

Strong learning motivation, as found by Hromalik and Koszalka, may boost second language learners' capacity for self-regulation, while the appropriate selection of a learning method can have a similar effect [16]. When learners have both internally-motivated mastery learning goals and externally-motivated achievement learning goals, their academic performance is generally relatively good.

3.2. The Factors Influencing Students' Learning Styles

Reid finds native language background influences learners' perceived style of learning. Second language learners from different language backgrounds sometimes have different choices of preferred

learning styles due to cultural or mutual factors. Reid also finds out that among university students, students' preference for learning style is also affected by the category of the major subject [13]. In general, students in all majors agreed that kinesthetic learning was more beneficial to learning, at the same time, except for computer science majors, students in the study did not agree that group learning was more beneficial to their own learning. For example, students in the humanities are the least likely to prefer visual learning, while students in computer science, natural sciences, business, and medicine are more likely to be exposed to auditory learning materials. It is conceivable that engineering and computer science students have a greater preference for tactile learning than humanities students since their professional learning outcomes are linked to more frequent exposure to operational goods. In addition, Ellis discovers that a student's personality and cognitive style will influence the student's preferred method of instruction [2]. The differences between students' preferred methods of learning become most apparent in these two categories. A student's preferred mode of instruction is likely to reflect both their upbringing and their academic training. The learner has a natural preference for some learning strategies over others, based on factors like personality and cognitive approach to learning. However, the learner's prior schooling may also influence her approach to learning, leading her to anticipate or even demand familiar learning settings when faced with novel ones. A second-language learner, for example, who is acclimated to the traditional, form-focused style of language instruction or the dissemination approach of education in general, may have a negative reaction to a more "communicative" manner of instruction. An "idea" of what classroom learning entails is internalized by the learner, and once this has occurred, the learner's strategies reflect the "idea" that they have internalized. This conceptual set, on the other hand, is not immutable. A student could decide to modify her "idea" because of the many learning experiences she has had or after she has received "training" in various new methods and approaches.

Researchers Chermahini et al. looked into the correlation between gender and English exam scores, and they discovered an interesting gender-by-learning-styles interaction. $F(3, 481) = 3.6$, $MSE = 32.7$, $p < 0.05$, $\eta^2 = 0.02$ [14]. $F(1, 485) = 1.4$, $MSE = 12.59$, $p > 0.05$, $\eta^2 = 0.003$ indicates that the sex factor did not play a major part in the results. $F(3, 481) = 3.45$, $MSE = 31.2$, $p < 0.05$, $\eta^2 = 0.021$; the main interaction of learning technique was statistically significant.

Those who are successful in learning a second language, according to a comparison of logs conducted by Hromalik and Koszalka [16], have high levels of intrinsic motivation, particularly personal emotional motivation. They will be able to better manage their time, and through reflection, they will evaluate and modify their approach to learning. Students who performed poorly in school tended to blame outside forces for their failure to learn and to be highly motivated by practical considerations.

3.3. The Significance of Learning Style Research on Language Teaching

According to Oxford, effective language instruction must take in mind the growth of individual students' unique learning styles in order to maximize both the quantity and quality of students' foreign language acquisition [17].

Jie holds the point that the final target of teaching is helping students to be independent learners. If a student has the flexibility to learn using strategies typical of other learning styles, then that student's learning achievement will improve. Therefore, teachers should play an auxiliary role in students' learning process, and improve students' learning efficiency and achievement by helping students to recognize and get familiar with their learning styles. By assisting students to choose and correctly utilize the learning advantages of their own learning style, teachers can also help students explain the importance of using other learning styles to achieve the effect of diversified development of students [18].

Smith & Renzulli refer that students' preferences and choice of learning style have an indirect influence on the development of teaching [19]. By "matching" teachers and students, that is, the learning style and teaching style can be matched, and the similarities and differences between teachers and students will become the factors that affect the maximum growth of students. For example,

impulsive students with larger personality differences, such as matching impulsive students with reflective teachers, students are more likely to be influenced by the teacher's thinking habits in terms of handling tasks during learning progress. Impulsive students will think from a more reflective perspective when learning. Meanwhile, when students are subjected to teaching styles that are inconsistent with their learning style preferences for extended periods of time, tension, dissatisfaction, and exhaustion may emerge if the mismatch between teachers and students reaches the adaptive limit of students. In the realm of education, this serves as a crucial point of reference.

4. Conclusion

Understanding students' learning styles is essential for personalizing instruction and providing successful learning tactics. Meanwhile, the impact of learning style theory on foreign language learning remains debatable. While some research shows the link between learning styles and learning outcomes, the academic community is divided on the notion and assessment of learning styles. As a result, further study, and debate on how to utilize learning type theory in foreign language acquisition is required.

Although learning styles have received extensive attention related to learning a new language, there are still some research gaps. The reliability and validity of learning style measurement tools is one of the research gaps. According to the studies above, researchers use variety of tools and methods for measuring learning styles, but there is no consensus on the accuracy and effectiveness of these tools. Therefore, there is a need for further research and development of more reliable learning style measurement tools.

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