

# The Relationship between Learning Styles and Foreign Language Learning

Kexuan Chen \*

Department of foreign language, Xiamen University of Technology, Xiamen, Fujian, China

\* Corresponding Author Email: 2010301203@s.xmut.edu.cn

**Abstract.** Nowadays, more and more people think education should focus on how students learn rather than how teachers teach. This kind of “student-oriented” education brings about some studies about students’ learning styles. Learning styles play an important role in language learning. This paper reviews some different definitions of learning styles, some factors that are related to learning styles, and several studies about some learning outcomes and academic performances resulting from different learning styles. By analyzing the results from different learning styles, the researcher tries to find out the relationship between learning styles and language learning, which is aimed at helping students learn a foreign language easier and better as well as giving teachers some implications about how to teach students with different learning styles. In this research, the researcher focuses on perceptual learning styles which contain visual, auditory, and tactile learning styles, finding that they all have some effects on language proficiency and influence language learners’ academic performances in different ways. This paper contributes to present some earlier research on learning styles and the acquisition of foreign languages and examine how the two relate.

**Keywords:** Learning styles; Foreign language learning; Perceptual learning styles.

## 1. Introduction

Learning styles play an indispensable role in people’s knowledge acquisition. If learners’ learning styles match the learning environment and resources, they can learn better and easier. Nowadays, the research of foreign language education also pays more and more attention to the subject status and individual differences of foreign language learners in the process of foreign language learning. The individual differences of learners in the learning process are not only the differences in intelligence, interest, motivation, and other aspects. However, more importantly, the differences in learning styles [1]. Each student receives information in a different way, therefore they must fully utilize their preferred method of learning [2]. Before doing it, they should first understand if their learning styles relate to language learning. This review paper investigates the relationship between learning styles and foreign language learning. This paper will review some definitions of learning styles, several factors that may be related to learning styles, the perceptual learning styles and their influences on foreign language learning in detail in the main body section. This review covers three types of perceptual learning styles, including visual learning styles, auditory learning styles, and tactile learning styles.

## 2. Different definitions of learning styles

Currently, there is no single precise definition of learning styles. Among all the studies about learning style, the most important and serious problem is the confusion of its definition [3]. As a result, this paper will first demonstrate different definitions of learning styles from different people. Although it is possible to define "learning style" simply and generally as how people understand, remember, absorb, process and store new information and acquire new skills, different theorists define learning style differently [4]. Felder and Henriques argued, the methods a person typically uses to acquire, store, and retrieve information are referred to as that person's learning style [5]. Brown argued that cognitive styles are typically referred to more broadly as learning styles when they are especially tied to an educational context where affective and physiological components are

intertwined [6]. Everyone learns a foreign language in a different way due to their varied educational and cultural backgrounds, personalities, and learning experiences. This results in varying degrees of success. All of the many favored methods are commonly referred to as "learning styles" [7]. Learning style can be defined as students' propensity to adapt such techniques in their learning as a level of obligation to develop a learning strategy and understanding consistent with the demands of learning in school and the subjects' needs [8]. Since each definition is created from a single perspective, we cannot conclude which definition is superior. Getting the fundamental concepts of learning style makes a lot of sense [7]. These styles are relatively stable and will be used by people regardless of the subject being studied or the skill being mastered [9]. Although there are many different opinions related to the definition of learning styles, through reading disparate ideas, we can have a rudimentary knowledge of it. Therefore, this paper takes the definition of learning style is students' propensity to adapt some techniques in their learning as an obligation to develop a learning strategy and understanding consistent with their demands of learning in school and the subjects' needs, which is because most students may unconsciously develop different learning styles according to different requirements in school in order to have better academic performances. This definition can best suit the current situation of learners.

### **3. Some underlying factors related to learning styles**

#### **3.1 Educational Specialization**

Educational specialization refers to people's majors or chosen fields when they grow up, which can shape people's learning styles. Early learning styles are shaped through teaching pupils how to learn and by creating positive attitudes toward particular sets of learning skills. Although primary education is generalist, a process of growing specialization begins in high school and becomes more pronounced during the college years. This specialization in social knowledge will have an impact on people's learning orientations, resulting in a particular relationship between early training in an educational specialty or topic and learning styles [10]. Then, the following examples will illustrate this better. For instance, those who major in the humanities, history, English, political science, or psychology typically have a variety of learning preferences. Converging learning styles are used by professionals in fields like engineering and medicine that are more abstract and applicable. Individuals with accommodating personalities frequently hold degrees in the fields of education, communication, and nursing, while those with assimilative personalities usually hold degrees in the physical and mathematical sciences [10]. Therefore, educational specialization plays an integral role in the formation of learning styles, and people are supposed to consider this aspect when talking about learning styles.

#### **3.2 Gender**

Most people would generally agree that biological variations between the man and woman brains do have an impact on how cognitive skills develop [11]. Hence, it is necessary to figure out if gender has some influence on learning styles. Maubach and Morgan conducted research with 72 A level students regarding possible links between gender and learning style. The study shows four main gender-related characteristics: a male is willing to take risks, speak spontaneously in a foreign language, and ask teacher questions to aid their understanding. Female students are interested in reading and presenting well-organized written work [11]. Another research found that male participants showed a higher tendency to use achievement motivation, visual, extroversion, and tactile sensory, as well as right brain dominance learning styles than female participants. Women showed a tendency toward introversion learning styles [3]. Hence, these two research papers showed that men and women have quite different performances in learning, which can well demonstrate that gender had some effects on learning styles.

### 3.3 Learning Strategy

There is disagreement about whether there are some relationships between learning strategies and learning styles. According to Wen and Johnson's article, they contended that learning styles may influence strategy [12]. However, in a study by Weng Pei-Shi, the result did not support the idea. He looked into 71 non-English majors in New Taipei City, and using the English Competency Test, classified them into two language proficiency levels (high or low). Two surveys were used to examine how learning styles affect the use of reading strategies. In order to do that, the impact of the three main learning styles-visual, auditory, and kinesthetic-on the six different types of learning procedures was examined using one-way ANOVA. The findings indicated that the usage of learning strategies was unaffected by learning styles. Researchers found that students with auditory learning preferences use more social skills than those with visual preferences, which is important to note for a more in-depth examination of the six types of learning methods [13].

## 4. Different language learning outcomes result from different learning styles

### 4.1 Contents of perceptual learning style

The participation of the learner's sense organs in their learning process, such as their eyes and ears, is addressed by the perceptual learning style, also known as sensory learning style. Students can use their senses to respond to external stimuli [7]. This covers learning styles that are tactile, aural, or visual. Visual styles, as implied by their names, indicate a person prefers to process information visually, meaning they prefer to read rather than only listen to lecturers. Instead of spoken or written words, visual learners prefer information to be conveyed through images, diagrams, timelines, videos, and demonstrations [5]. Verbal learners who learn by hearing or listening are known as auditory learners. They favor written or verbal explanations over visual displays [5]. They can prefer conversing with others and detest reading books [7]. Therefore, they rely heavily on listening input to absorb the information. When it comes to tactile learning style, it is noticeable that the word tactile can be used interchangeably with kinesthetic. Students with tactile learning styles need to keep their hands busy when studying. Learners who prefer the tactile learning style may need whole-body movement and authentic experiences to ensure that they assimilate knowledge, which means they can learn when they are totally involved [3].

#### 4.1.1 The relationship between VAK learning styles in the classroom and English learning

It is found that young kids' English proficiency and interests in English may be significantly improved through applying VAK (visual, auditory, and kinesthetic) learning styles in class, according to Lista Litta1 and AstryBudiarty [14]. Based on an interview conducted at TK Tri Putri in Makassar Suburbs, students found it hard to study English and they also have less interest in learning English. According to this problem, the researchers created a classroom which combines visual, auditory, and kinesthetic learning styles to help students better absorb knowledge because Students can learn by using multiple senses, which will make learning easier and increase their English proficiency. The research conducted pre-test and post-test to find out the students' basic achievement and the effectiveness of that special class respectively. In order to better analyze the result, in the study, a graph illustrated the test results of pre-test and post-test, A graph showing the test results for the pre-test and post-test revealed that the majority of the pupils scored in the extremely bad category on the pretest. There were 18 students who received low grades, 15 kids who received fair grades, and 1 student who received good grades. It's evident that none of them received a very high classification. However, 10 students received very good classification on the post-test, followed by 17 students who received good classification and 7 students who received acceptable rating. And this time, none of them were classified into poor students. It is evident that pupils' post-test scores were significantly higher than their pre-test scores. As a result, the VAK learning styles method of establishing a cozy classroom proved effective in boosting the students' English proficiency [14]. It can be concluded from the fact that students who were treated through the VAK learning style classroom had better

academic results than before that the VAK learning style is a significant technique which has good effects on kids' English learning.

#### **4.1.2 The relationship between visual learning style and vocabulary learning**

Visual preferences have a great impact on foreign vocabulary learning. In another study, the learner's vocabulary was tested through a multiple-choice test before beginning the study. Then, the text input-enhancement group, the visual cues group, and the control group were created from a random distribution of the participants. Target words were supplied in the texts for the first group with important lexical items bolded. For the second group, several visual aids, including images, flashcards, and videos, were employed to demonstrate vocabulary. Vocabularies were taught to the control group using the conventional approach of teaching vocabulary. Following therapy, participants completed a post-test to gauge their level of vocabulary learning. The result showed that participants in the visual group outperformed those in the textual and control groups, which means they benefited more [15]. The result may come from the fact that students were exposed to massive quantities of visual materials, which could greatly attract their attention so that they could acquire and remember words easier. Apart from that, pictorial techniques in teaching vocabulary established a fun class that enables language learning to be an enjoyable activity. Therefore, it can be argued that the visual group learned more vocabulary in a significant way. To put it another way, a visual approach is superior to text-based input enhancement for improving vocabulary among Iranian intermediate EFL (English as a Foreign Language) learners [15].

#### **4.1.3 The relationship between tactile learning style and English learning**

Tactile learning style have a negative impact on students' foreign language learning. In a study conducted in China, the researcher investigated college students from Henan. Students' language proficiency was divided according to their scores in CET4 (College English Test Band 4) or TEM4 (Test for English Majors-4), two kinds of Chinese English ability exams. In this study, one of the finding is-tactile learning styles has a negative correlation with language achievement, which shows that students with this kind of learning style might not adapt well to the learning environment. The traditional ways of students' styles of learning are strongly visual, which focus on reading books and looking at the blackboard to get the information, and auditory, which means they like listening to what teachers say. Therefore, Students with tactile learning styles might be at a disadvantage in learning a foreign language [3]. However, there are some remedies to solve the problem. They should try to find some learning chances related to physical activities or hands-on experiences. If these students get the chance to do something physical with materials, for instance, doing some experiments, building models, and touching and working with the material, they are likely to do better because these are the most successful learning situations for them. It could significantly help them assimilate knowledge [7].

#### **4.1.4 The relationship between learning style preferences and foreign language academic results**

The use of different learning styles has a great influence on student academic performance. A research use language proficiency (EPT)-the language ability in language use as well as A Grade Point Average (GPA)-the average of all final grades for courses within a program, weighted by the unit value of each of those courses to investigate students' foreign language performances and figure out how these two things are influenced by different learning style. The research was conducted at one of a university in Lampung. Participants completed questionnaires and researchers collected the information related to the use of visual, auditory, or kinesthetic learning styles. From a table shown in the research, the GPA has a positive correlation with learning style. It means that the higher the student's GPA, the higher the need for using a learning style to improve academic performance. Apart from that, a similar trend can be found in terms of EPT score, which means the EPT and learning style has a positive correlation. The higher the students' EPT score, the higher the need for using a learning style to improve students' academic performance.

According to another table in the research, the highest mean score of learning style preferences that can improve students' performance was kinesthetic, followed by auditory, and the last one is visual [8]. It shows that the kinesthetic learning style is more effective in improving students' performance than the other two styles.

According to the findings, there is an impact of the use of different learning styles on student academic performance. From the research, it indicated that the learning styles that can enhance students' academic performance is the visual learning style. Apart from that, the kinesthetic learning style is more efficient in improving students' performance than the other two kinds of learning styles [8]. As a result, it can be concluded that visual, auditory, as well as kinesthetic learning styles all have their unique impact on students' foreign language learning and students should adopt them wisely to achieve better academic performances.

## 5. Conclusion

In this review, the researcher lists four divergent learning styles definitions. Although there is no best choice, the researcher thinks that one of them explains the term clearly: learning style is students' propensity to adapt such techniques in their learning as a level of obligation to develop a learning strategy and understanding consistent with the demands of learning in school and the subjects' needs. There are three prominent factors have something to do with learning styles: educational specialization, gender, and learning strategy. The researcher also reviews the perceptual learning styles, which means the learners' sense organs' involvement in learning. They contain visual, auditory, and tactile learning styles.

After reviewing papers about these three styles and foreign language learning, the researcher found something meaningful. According to the paper about applying VAK learning styles in the classroom, if teachers use visual, auditory, and tactile styles, students' language test results can be greatly improved. It means that applying the right learning styles is important not only for learners but also for teachers. If teachers can apply useful learning styles in the classroom, language learners will benefit greatly. In the research about visual learning styles and vocabulary learning, visual methods are more useful and effective than other kinds of input in terms of vocabulary learning. It means that visual input has a positive impact on foreign language learning. As for the tactile learning styles, a previous paper claimed that it might negatively influence students' foreign language study because traditional learning ways are strongly visual and auditory, which means they like reading and listening in class. Another paper indicated that the visual learning style could best enhance students' academic performance. Apart from that, the kinesthetic learning style is more efficient in improving students' performance than the other two styles. As a result, it can be concluded that these three kinds of learning styles all have their unique impact on students' foreign language learning and students should adopt them wisely to achieve better academic performances. Learning styles are also very essential to teachers because students' academic performances may result from classroom learning. Teachers should also notice students' different learning styles and design effective language class according to them so that learners can acquire language better.

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