

Research on Liberal Arts Education and Students' Learning Style

Xuxuan Huang

School of International Education, Guangzhou College of Applied Science and Technology, Guangzhou, Guangdong, 526000, China

Abstract: *The aim of this essay is to discuss the meaning of liberal arts education and students' learning style, as well as to analyze how the liberal arts education affect the learning style by exploring the three articles. From the critical review of the articles, there are many factors affecting students achievement in second language acquisition. Students learning styles are one of many important aspects which need to be considered when studying students achievements and attitudes. In order to be more independent and efficient second language learners, the students should be aware of how languages are learned and what their own preferred learning style is—how they learn best. Consequently, it is necessary and essential to determine students' learning styles.*

Keywords: *Liberal Arts Education; Learning Style; Perceptual Learning Style*

1. Introduction

Existing work has identified Individual Differences (IDs) is an important factor to the success in SLA. Among the various IDs that exist, learning styles appear to be especially significant since the way they mediate between personal characteristics and learning outcomes. It is considered matching learning conditions to learning styles preferences leads to more uniform success than providing a single style of instruction to a diverse group.

The aim of this essay is to discuss the meaning of liberal arts education and students' learning style. There are five essential parts in this essay, including theoretical framework about learning styles, summary and contributions of three articles, limitations, future research, and implication.

2. Theoretical framework

2.1 Liberal Arts Education

Liberal arts education is a broad and holistic approach to higher education that emphasizes the development of intellectual abilities and critical thinking skills rather than specialized professional or technical skills[22]. It traditionally includes the study of humanities, social sciences, natural sciences, and sometimes fine arts. The goal of a liberal arts education is to cultivate a well-rounded individual with the capacity to think critically, communicate effectively, and engage with a variety of disciplines and perspectives[23].

2.2 Learning styles

The term 'learning style' can be used to describe an individual's natural, habitual, and preferred way of absorbing, processing, as well as retaining new information and skills (Reid, 1995). Learning styles models include Gregorc's (1982)[8] Gregorc Style Delineator, Kolb Boyatzis and Mainemelis' (2001)[10] Experiential Learning Theory, as well as Riding's (2002)[19] Cognitive Styles Analysis (CSA). Take CSA for example, it views people as differing in two primary ways—whether they see things as a whole ("wholistic") or in parts ("analytic") and whether they think in words ("verbal") or in images ("imagery") (Tight, 2010, p.4)[21].

Reid (1995)[16] indicates that three major categories of learning styles are relevant to the field of foreign language learning, which are sensory or perceptual learning styles, cognitive learning styles as well as affective/temperament learning styles. Sensory or perceptual learning style has to do with the

physical environment in which people learn, and involves using their senses to perceive data. Cognitive styles are relevant to thinking, problem solving abilities and the ability to organize information. Cognitive learning style research refers to field independence and field dependence in learners (Reid, 1995)[16]. The field independent students prefer to learn in a context where rules, instructions, discrete-point tests as well as imitation are stressed. By contrast, the field dependent students generally enjoy cooperative and experiential learning environments. In addition, affective learning/temperament learning style takes students' emotions, values and feelings into consideration (Reid, 1995)[16]. This learning style focuses on the learner (e.g., his/her motivation, level of engagement, interaction and reception to feedback) as well as how he/she reacts to learning opportunities.

In addition to learning styles models, there are many multidimensional learning styles measures existing, including Oxford's (1995b)[12] Style Analysis Survey and Cohen, Oxford and Chi's (2006)[2] Learning Style Survey, as well as Reid's (1995)[16] Perceptual Learning Style Preference Questionnaire. Although significant variety exists among learning styles models and measures, it can be seen that the majority of models include the treatment of the perceptual modalities. Almost all of the multidimensional models assess the auditory and visual modalities, as well as the tactile/kinesthetic modality. Hence, the nature of perceptual learning styles is the next matter to be considered.

2.3 Perceptual Learning Style (PLS)

Perception can be considered as "the process by which the brain systematically collects information" (Keefe, 1988, p.1)[9]. This process takes place through the perceptual modalities—sight, hearing, touch, smell, and taste. PLS is defined by Reid (1987)[17], who divides perceptual learning styles into auditory (hearing), visual (seeing), tactile (hands-on), kinesthetic (whole-body movement), group (like to work in group), and individual (like to work individually). Among these, many learners have their own preference to receive information—perceptual learning style preference.

Learners with a visual preference enjoy to receive new information through sight. Therefore, they tend to enjoy reading, seeing images, looking at concrete objects, and perhaps even imagining metal pictures. According to Oxford (1995a)[11], this is the most common perceptual preference in North America, where somewhere between 50% and 80% of people report being visual learners.

By contrast, auditory learners prefer to receive new information through hearing. They favor instruction through lectures, role-plays, oral directions, audio tapes, recitation, and conversation (Dörnyei, 2005; Oxford, 2003)[13]. Auditory learners may represent somewhere between 20% and 40% of the population (Dunn & Dunn, 1978; Reiff, 1992)[18]. In addition, tactile learners prefer to learn by doing and by touching. They learn best by being active, and they often depend on physical interaction to master a concept (Sarasin, 1998)[20].

3. Empirical Research

3.1 Discussion of the three articles

This review includes a discussion of the three empirical articles, which are Daniel G. Tight's (2010)[21] "Perceptual Learning Style Matching and L2 Vocabulary Acquisition", Almasa Mulalic, Parilah Mohd Shah, and Fauziah Ahmad's (2009)[1] "Perceptual Learning Styles of ESL Students", as well as Janet Renou's (2008)[15] "A Study of Perceptual Learning Styles and Achievement in a University-level Foreign Language Course". The discussion refers to the aims of the three articles and results of their studies, as well as similarities and differentials among them.

Tight's article

This research article written by Daniel G. Tight (2010)[21] derives from the journal of Language Learning, which relates to the relationship between perceptual learning styles matching and L2 vocabulary acquisition. The study aims to explore learning and retention of concrete nouns in second language Spanish by first language English undergraduates. Results of the article indicate that students of different learning style preferences are equally successful at L2 vocabulary acquisition, as well as multiple modalities instruction might be more beneficial than matching individual preferences.

Mulalic, Shah, & Ahmad's article

This research article written by Mulalic, Shah, and Ahmad (2009)[1] comes from the journal of European Journal of Social Science. It focuses on exploring problems and challenges related to

Perceptual Learning Style (PLS) of students in English as Second Language Situation (ESL) in Malaysia. The aim of this article is to analyze both learning styles and the possible implications and consequences of determining students' PLS. Since little attention has been paid to how learners learn and how teachers teach in many institutions, the study attempts to determine the learning styles of the students, as well as the differences in learning styles of students according to their gender and ethnicity. Being different from previous results, findings in this study show that the students' preferred learning style was Kinesthetic Learning Style (KLS). Furthermore, they expressed minor preference for Visual, Auditory and Group Learning. As well as students expressed negative preference towards Individual and Tactile Learning Styles[3].

Renou's article

This research article written by Janet Renou (2008)[15] comes from the University of Puerto Rico. The aim of the study is to examine whether there is any relationship between a particular perceptual learning style (visual, auditory or tactile) and student success in an introductory university-level French course. Findings of the study show no significant differences between predominant learning-style groups (visual, auditory, tactile, combination learners) and course grades. Renou (2008, p.6)[15] explains that whether one is a visual, auditory, tactile or combination learner made no significant difference in their grades.

Comparison of the three articles

One of the similarities of the three research articles is that all of them focus on studying the relationship between perceptual learning styles and student success in second language acquisition. However, the content of the studies are completely different. Tight's article pays attention on the relationship between perceptual learning styles matching and L2 vocabulary acquisition, while Renou's article focuses on the relationship between perceptual learning styles and student success in different course grades. Mulalic, Shah, and Ahmad's article emphasizes the importance of determining students learning styles and making them aware about different approaches to learning.

In relation to the research method, it can be found that both Renou's study and Ahmad's study choose the questionnaire. Students in Renou's study were required to complete the Barsh Learning-Style Inventory Questionnaire, while students in Ahmad's study were asked to finish the Perceptual Learning Style Preference Questionnaire (PLSPQ). By contrast, Tight's study involves four different kinds of vocabulary instruction materials which are visual, auditory, tactile/kinesthetic, and mixed modality. Each type of instruction consisted of both a classroom-based and a computer-based module.

3.2 Contributions of the three articles

Contributions of Tight's article

The study has provided confirmation for previously reported profiles of perceptual learning style preference. It has verified that many people have a single perceptual learning style preference. In addition, the study revealed that the most common preference is visual learning style, followed by the auditory and kinesthetic/tactile learning techniques.

Moreover, the article showed that these perceptual modality preferences did not have any significant influence either on the vocabulary gains or on the vocabulary retention. It means participants acquired and maintained L2 Spanish vocabulary equally successful regardless of perceptual modality preferences[4].

Although students with different learning style preferences were equally well at acquiring and retaining L2 Spanish vocabulary, certain instructional conditions favored these processes more than others. Mixed-modality instruction was the most advantaged for participants in the current study. It led to the greatest overall gains on each of the post-tests, and to the highest level of retention after both one week and one month, since participants increasingly appealed to such activities as a memory aid (Tight, 2010)[21].

Style matching also showed certain benefits in the current study. Learning through a more preferred modality led to lexical knowledge that abated at a slower rate than learning through a less preferred modality. This indicates that activities that mismatch with learning style preferences may cause substantial initial vocabulary gains soon lost.

Contributions of Mulalic, Shah, & Ahmad's article

The research article has confirmed the importance of assessing students learning styles, and suggested that it is essential to determine students learning styles and make them aware about different approaches to learning. In addition, the answers to the research questions showed that there are significant differences in learning styles of ESL students among Malay, Chinese and Indian students, and between males and females.

Contributions of Renou's article

The study's most significant contribution is providing evidence to confirm there are no significant differences between predominant learning-style groups (visual, auditory, tactile, combination learners) and course grades. Hence, it suggests that it is essential to understand students learning styles, and teachers should tailor teaching style to meet students' learning preferences, as well as teach the material to gear towards their strengths. Additionally, it also supports the idea that learners should be exposed to more than one sensory modes of learning.

Although the content of the three articles are totally different, there are several similarities among them. First, all of the three articles have confirmed the close relationship between perceptual learning styles and student success. Additionally, both Renou's article and Tight's article emphasize that it would be more helpful if students are exposed to more than one sensory modes of learning. Moreover, both Renou's article and Ahmad's article have stressed the importance of determining students learning styles. This can be found from Renou's article (p.8)[15]:

“The view is that if we know the learning style of our students, we can tailor our teaching style to meet their learning preferences, and teach the material to gear toward their strengths.”

4. Limitations

4.1 Limitations of Tight's article

There are several weaknesses in Tight's study. First, the study only considered one learning style variable—perceptual learning style. Perceptual style preferences were chosen since they are a common component to many learning styles models, which reflect a critical aspect of the learning process and are relatively accessible. Nevertheless, most learning styles models recognize multiple style dimensions, some even as many as 24 (see Keefe, 1988)[9]. Therefore, there were other learning style preferences and other individual differences which were not considered in the current study.

The generalizability of the current study's findings is limited by the study sample and the type of vocabulary. Participants came from intermediate Spanish language classes at one university, and consequently do not represent a true random sample. Furthermore, they learned a very specific type of vocabulary—concrete Spanish nouns which cannot represent all kinds of lexical knowledge. Therefore, it should be very careful when applying the findings from the study to university-level L2 vocabulary learning.

4.2 Limitations of Mulalic, Shah, & Ahmad's article

Results of this study are somewhat different from previous. In most of the past researches students disfavored Group style while students in this study had minor preference for Group learning. Some researchers have warned that the results on learning styles cannot always be generalized, since there are many factors could affect students' preferences towards particular learning style such as educational background, ethnicity, gender and motivation to learn.

4.3 Limitations of Renou's article

Because of the small number of participants and limited design, it is difficult to draw strong conclusions from the current study. A future study would require a greater number of participants in the hope that there could be a larger spread of students across all course grades and greater representation of the categories of learning styles. As well as a greater number of students would allow to run more powerful statistical analyses.

Moreover, because the learning-style questionnaire is a self-report instrument, one of the elements that can affect validity is the extent to which those who complete it have a clear understanding of themselves. Drysdale et al. (2001)[5] indicate that knowing themselves, as well as internal factors such

as mood, illness or stress can influence how students complete the questionnaire. Gregorc (1979b)[7] lists three weaknesses of existing self-assessment instruments: (a) the instruments are exclusive (i.e., they focus on certain variables); (b) the students may not self-report accurately; and (c) the students have adapted for so long that they may report on adapted preferences.

Although the three articles have contributed a great deal to the theory and practice of second language acquisition, their studies still have several limitations in terms of research methods, participants and instrument. Consequently, in order to fully understand the role of learning styles in second language acquisition, additional research efforts are needed.

5. Future research

5.1 Future research of the three articles

Future research of these articles should address the limitations of the studies that were just mentioned. For instance, in Tight's study, there is a need for subsequent studies to investigate the effectiveness of instruction through the perceptual modalities for learning other types of vocabulary, such as verbs, abstract nouns and adjectives that are often considered more challenging to acquire than concrete nouns (Ellis & Beaton, 1995)[6]. By targeting these types of words, future research will provide further information from which to assess the general benefits of this method of lexical instruction as well as its relationship to relevant learning style preferences. In addition, future research also needs to address the role of other types of style preferences in vocabulary learning. Additionally, future work in this field should continue to experiment with various activity types, making sure to include mixed-modality and tactile/kinesthetic instruction, but not just focus on auditory and visual instruction, as the former are still only minimally researched, especially in L2 adult vocabulary learning. For the other two studies, instruments should be improved, as well as the number and type of participants also need to be addressed.

5.2 Future research in this area

Many variables about the learning styles of second language learners need further research and analysis. Reid (1987)[17] points out that translation of the questionnaire into students' native languages would provide baseline data for a longitudinal study of those students' learning style preferences. Therefore it could be administered to NNSs whose English is at an elementary level. Moreover, he indicates that the relationship between teaching and learning styles and developmental processes also need to be studied. For example, should beginning language learners be taught initially in their preferred learning styles in order?

Reid (1987)[17] also indicates that second language researchers should focus on the long-term goal of an integrated student profile—cognitive, affective, perceptual, and environmental. Researchers should move beyond impressionistic, redundant descriptions, and towards assessment procedures which will improve students' independence and initiative in learning.

6. Implications and insights

6.1 Insights from this review

It can be learned from the review that many factors affect students achievement in second language acquisition. Students learning styles are one of many important aspects which need to be considered when studying students achievements and attitudes. In order to be more independent and efficient second language learners, the students should be aware of how languages are learned and what their own preferred learning style is—how they learn best. Consequently, it is necessary and essential to determine students learning styles. Failure in accommodating different learning styles often result in learners' poor performance.

In addition, researchers have indicated that teachers often have their own teaching preferences that may be affected by their own learning style preferences. As well as differences do exist in learning styles among the students from different ethnic background and different gender. Hence, teachers need to be particularly careful in teaching since their responsibility is to create a favorable learning environment that will accommodate students from various social, cultural, ethnic background, as well

as learners with different learning styles.

6.2 Suggestions for future classroom teaching

The research suggests that students should be made aware of their learning style preferences. The awareness of their learning styles may encourage them to realize the importance of learning styles and that it plays a crucial role in their learning. According to Pask (1976)[14], knowing one's learning style is important in language learning.

In addition, when the learning styles are determined, it is suggested that instructors should take into consideration differences among the students when designing the course material[6]. Variety of the materials should be incorporated in the language classroom. Since the differences are established among students from different ethnic and gender background, those differences should be reconsidered when teaching foreign language. Moreover, students are also advised to try to adjust to different learning circumstances to avoid any confrontations when exposed to learning styles that does not suite them.

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