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Learning styles of language learners in an EFL writing class

Aranya Srijongjai*

Lecturer, Faculty of Humanities, Srinakharinwirot University, Sukhumvit 23, Bangkok 10110, Thailand

Abstract

EFL sholars have widely discussed how to manage a class to suit students' learning styles, and a number of studies have investigated learning styles and their influences on students' academic achievement. This paper presents results from a study of learnng styles of Thai English major students in an EFL writing class. The objectives of the study were to identify the learning styles of these students and to see whether there were significant differences of their learning styles based on their achievement levels in their English writing course. The participants of this study were 88 second-year English majors in the B.A. Program at the Faculty of Humanities, Srinakharinwirot University, Thailand. The instruments used in the study were the Memletics Learning Styles Inventory and a semi-structured interview. Cronbach's alpha of the inventory was 0.75. The data were analyzed using means and the one-way analysis of variance (ANOVA). Data analysis showed that the average primary and secondary learning styles of the students were social and aural and there were no significant differences of the students' learning styles based on their achievement levels in the writing class.

Keywords: academic achievement; EFL writing; learning styles; Memletics

1. Introduction

In the year 2000, Thailand undertook an educational reform focusing on organizational restructuring. With disappointing results, a following round of educational reform was launched by the government in 2009 aiming this time at the quality of education ("Call to Press," 2009). Since one of the important issues mentioned in the reform was the learners' quality improvement, learners' skills, knowledge and appropriate characteristics must be taken into consideration (Ministry of Education Thailand, 2010). The idea of learner-centeredness has long been remarked by educators and how to manage a class to suit students' learning approaches have widely been discussed. According to Ellis (1994), factors of interest to several researchers are individual learners' differences. Also, it is believed that students' learning is influenced by learning styles and preferred learning approaches (Abu-Moghli, Khalaf, Halabi, & Wardam, 2005). Many researchers also regard learning styles as crucial factors in education (Rourke & Lysynchuck, 2000), and this idea has become the baseline for many studies and analyses which found the apparent

* Aranya Srijongjai. Tel.: +66-81-372-3357; fax: +66-2-258-4118.
E-mail address: aranya@swu.ac.th

correlation between learning styles and learning outcomes (Cassidy & Eachus, 2000; Giordano & Rochford, 2005; Kia, Aliapour, & Ghaderi, 2009; Marefat, 2007; Moenikia & Zahed-Babelan, 2010; Ounwattana & Moungchoo, 2008; Saricaoğlu & Arikan, 2009). The study presented below was conducted in support of Thailand's educational reform. Theories underpinning that study are outlined hereinafter.

The term "learning styles" has been defined by many scholars in various ways. They are described as the way to echo a concern with the application of cognitive style in a learning situation with many elements which are not mutually exclusive (Riding & Cheema, 1991), or the approach students use when they want to focus on, process, internalize, or remember new and difficult information (Dunn & Dunn, 1993). Learning styles can be interpreted as the approaches in which each person deals distinctively with different learning tasks (Hartley, 1998), or the common approaches used by students to learn a new language or any other subject (Oxford, 2003). They can also be defined as outstanding behaviors a person uses in his/her study or experience to acquire knowledge, skills or attitudes (Sadler-Smith, 1996). From these definitions, it can be noted that learning styles are viewed in different ways, ranging from mental to behavioral perspectives.

With the concern for the importance of learning styles in various contexts, several learning style models have been developed to explain individuals' learning style preferences. To help categorize these models, Curry (1983) proposed an onion metaphor to describe the relationship between different learning style theories. In Curry's metaphor, the first, most stable, innermost layer is the cognitive personality. This dimension involves the individual's approach to adapting and assimilating information. The second layer in the onion metaphor is information processing. This refers to individuals' way of processing information. The third layer, added later by Claxton and Murrel (1987), is social interaction. It describes individuals' preferences for social interaction while learning in the classroom. The last category of learning style models is instructional preference. This refers to individuals' preferences for learning environments or approaches. Since it is the outermost layer of the onion, it can be influenced by interaction with the environment and considered the least stable layer (Curry, 1983).

One of the learning style models that can be classified into the fourth layer of Curry's onion is the Memletics model. Its assessment tool, called the Memletics Learning Styles Inventory, is based on the concept that everyone has a mix of learning styles. Some people may have a dominant learning style, which is used more than the other styles, whereas others may use different learning styles in different situations. Further, learning styles are not fixed. Individuals can develop their abilities in less dominant styles, as well as boost their skills in the styles they already often use. The purpose of the Memletics Learning Styles Inventory is to help individuals discover their primary and secondary learning styles. It classifies learning styles into seven different types of learners: visual, aural, verbal, logical, physical, solitary, and social (Advanogy.com, 2003-2007).

> Visual (spatial) learners: They prefer using pictures, images, colors and maps.
> Aural (auditory-musical-rhythmic) learners: They love to work with sound and music.
> Verbal (linguistic) learners: They like to use words, both in writing and verbally.
> Physical (bodily-kinesthetic) learners: They prefer to use the body, hands and the sense of touch.
> Logical (mathematical) learners: They work well with numbers, patterns, and logic.
> Social (interpersonal) learners: They prefer to learn in groups or with other people.
> Solitary (intrapersonal) learners: They focus on the individual self, being independent and introspective.

As can be seen in the above definitions and concepts, learning styles, regarded as one factor influencing individual learners' differences, have been studied well. Knowing about students' learning preferences will help teachers in the way that they manage their teaching styles to suit those of the students' learning achievement (Callister, Khalaf, & Keller, 2000). In the EFL context, understanding students' different styles of learning will also help instructors to teach and manage their classes effectively to suit individuals' learning preferences (Wasanasomsithi, 2004). However, the application of learning styles in EFL writing classes and further research in this area is still needed.

2. Objectives and research questions

The objectives of this study were to identify Thai university level English majors' learning styles and to determine whether there were significant differences of English majors' learning styles based on their achievement levels in a writing class. It attempted to answer the following questions:

1) What are the learning styles of English majors who studied English writing at the Faculty of Humanities, Srinakharinwirot University, Thailand?

2) Are there significant differences of English majors' learning styles based on their achievement levels in a writing class?

3. Method

3.1. Participants

The participants of this study were 88 second-year English majors in the B.A. Program at the Faculty of Humanities, Srinakharinwirot University, Thailand. The participants were between 19-22 years of age and 16 were male and 72 were female. All of them studied the basic writing course taught by the researcher. They were categorized into three groups according to their academic achievement obtained from the writing course and the writing evaluation guideline adapted from the ESL Composition Profile created by Jacobs, Zinkgraf, Wormuth, Hartfiel and Hughey (1981). The first group of students (29.55%) was the students who had low achievement. The second (54.55%) and third groups (15.90%) referred to the students with medium and high achievement.

3.2. *Materials*

The instruments used in this study were a questionnaire and a semi-structured interview. The questionnaire contained the 70 questions of the Memletics Learning Styles Inventory (version 1.2) used for identifying the participants' learning styles. Ten questions were designed for the assessment of each of the seven learning style dimensions. The questions were evenly distributed, so that people who took the test did not know which question belonged to which learning style. There were three options available for each question ('0', '1', '2') and only one option could be selected for each item. The total points any participant could receive for any single style ranged from 0 to 20 (Advanogy.com, 2003). To test the reliability of the Memletic Learning Styles Inventory, a pilot testing was conducted. The data analysis revealed that Cronbach's alpha of the inventory was 0.75. Apart from the questionnaire, an interview guide for the semi-structured interview were prepared and reviewed by two specialists for use by the interviewer (the researcher) in a person-to-person interaction designed to acquire more information related to the English majors' learning styles.

3.3. Procedures

The questionnaire was distributed and the collected data were analyzed using descriptive statistics (means and standard deviations) and a one-way analysis of variance (ANOVA). The person-to-person-15-minute interview with fifteen participants was conducted later, with five randomly selected students from each achievement group. The data obtained from the interview were transcribed and used to support the findings obtained from the questionnaire.

4. Results

4.1. *Learning styles of English majors*

The results of the Memletics Learning Styles Inventory, as presented in Table 1 and Figure 1, exhibited the average learning styles of English majors based on their achievement levels. The data indicated that the general tendency of the English majors' primary and secondary learning styles were social (12.98) and aural (11.66),

followed by verbal (11.53), visual (10.65), physical (10.39), and solitary (10.20) respectively. The least preferred style was logical (9.76). The mean scores also revealed that the social style was the primary learning style of students in all three achievement levels. The students with low and medium achievement preferred aural as their secondary style, followed by verbal, whereas the students with high achievement preferred verbal as their secondary style. The data also showed that the least preferred learning style of low and medium achievement groups was logical while the least preferred style of the high achievement group was visual.

Table 1. The learning styles of English majors based on their achievement level

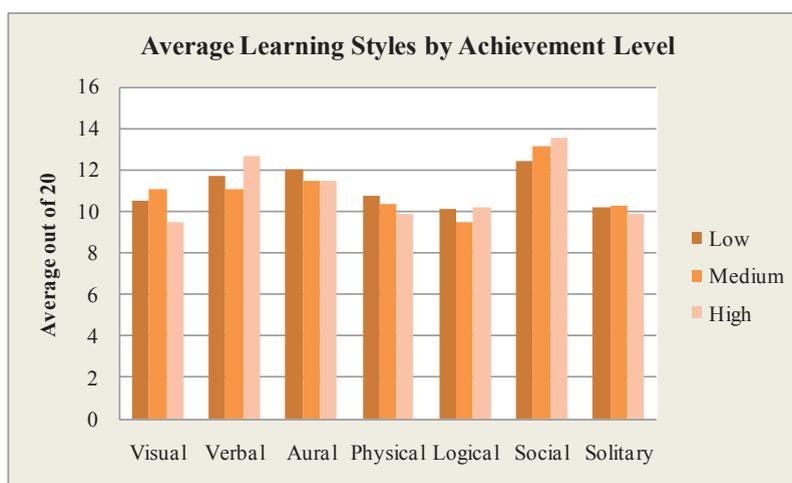| Achievement level		Learning style						
		visual	verbal	aural	physical	logical	social	solitary
Low	Mean	10.50	11.73	12.04	10.73	10.08	12.42	10.19
	SD	3.14	2.93	3.08	2.75	2.83	2.12	2.74
Medium	Mean	11.06	11.10	11.50	10.35	9.46	13.13	10.31
	SD	2.95	2.94	3.51	3.05	2.78	2.89	2.97
High	Mean	9.50	12.64	11.50	9.86	10.21	13.50	9.86
	SD	2.93	2.93	2.47	3.26	2.52	3.13	2.85
Total	Mean	10.65	11.53	11.66	10.39	9.76	12.98	10.20
	SD	3.02	2.96	3.22	2.98	2.75	2.72	2.86

Figure 1. Average learning styles by achievement level

The interviews revealed the same tendencies in the predominant learning style preferences of the students. Most of the participants were likely to be social and aural learners. While studying in class, they normally preferred listening to lectures and were willing to participate in group work. They also valued peer review activities and perceived them as an important step in the writing process. These results, in line with the ones derived from the questionnaire, were shown in the students' answers regarding the learning methods they used when studying in class, the teaching style they liked and their ideal writing classroom. Some examples of answers are shown below.

> "I prefer lectures and PowerPoint presentations with supplementary sheets. In a writing class, students should have a chance to write many drafts in each assignment. Editing, revising and peer reviews should be emphasized because I think feedback is important for writing."
>
> (Student 1, high achievement group)

"I prefer listening to lectures, but only in the way that they motivate me to search for more information after class. I also like presenting ideas in class discussions."

(Student 3, medium achievement group)

"I like group presentations. They help to boost my interest in studying. I also like to see my friends' presentations. If the lecturers use new and different instructional media, the class is more interesting."

(Student 5, low achievement group)

4.2. Analysis of variance (ANOVA) of English majors' learning styles

To detect whether there were significant differences of English majors' learning styles based on their achievement levels in a writing class, the data were analyzed with the one-way analysis of variance (ANOVA). The results showed no significant differences among the three groups of students. This seems to indicate that the students tended to have the same distribution of learning style preferences overall.

5. Discussion and conclusion

This study revealed the average learning styles of English majors who took an English writing course. The findings showed that social and aural learning styles were their primary and secondary learning styles preferred by the participants. These styles were followed by verbal, visual, physical, solitary, and logical styles respectively. The interview results corroborated the information drawn from the questionnaire. The students who preferred social and aural styles seemed to prefer interacting with others and listening to rhythm and sounds. When in class, it is likely that group activities and instructions via lectures would be welcomed by these students. The findings also indicated that social, aural and verbal styles were the top three learning styles preferred by students of all achievement groups. The results of this study are in accordance with the findings of Wintergerst, DeCapua, and Verna (2003) who detected the preferences of group activities of ESL/EFL students and the findings of Moenikia and Zahed-Babelan (2010) who found the importance of the roles of social, verbal and aural learning styles in second language learning. Although there were no significant differences of learning styles based on the students' academic achievement levels, some interesting points can be deduced from the results. The students with high achievement preferred verbal as their secondary style whereas the students with low and medium achievement preferred aural as their secondary style. These findings seem to confirm the concept of the Memletics model that verbal learners tend to have greater language ability.

For pedagogical implications, writing instructors should manage their classes, materials and teaching methods to facilitate students with different learning styles in order to develop their writing skills and help them achieve their academic goals. For example, group activities, teamwork projects, and peer reviews are recommended for fostering a collaborative classroom atmosphere which is favored by the social students. Conventional lectures as well as the use of songs and music via various types of media in a writing class are also agreeable to the aural learners. However, according to the Memletics model, everyone has a mix of learning styles, and learning styles are not fixed (Advanogy.com, 2003), so instructors should also accommodate other types of learning styles by providing diverse learning environments. McCarthy (1980) points out that instructors should vary activities so that students learn in their own preferred style and also can have a chance to develop other styles as well. As a result, matching and mismatching learning styles and instructional methods will complement the students' learning performance and create more flexible learners in the long run.

Some limitations of this study should not be overlooked. This study aimed at identifying the learning styles of English majors in one writing class. As such, the results cannot be generalized to all EFL English majors. It also focused on the seven learning styles of the Memletics model. This type of learning style models is directly affected by the surroundings and circumstances; therefore, the results of the students' learning styles may change over time and be influenced by the students' interactions with the environment. In addition, some others aspects, such as,

psychological factors and cultural influences were not included in the study. Further studies of learning styles in an EFL writing class and demographic and other aspects should be conducted.

Acknowledgements

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