

*Investigating Students' Learning Styles in Studying Chinese, Rajamangala  
University of Technology Srivijaya*

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**Abstract**

The purposes of the study were to study Chinese learning styles of students and to compare the students' Chinese learning style classified by gender, year, and major. The sample of the study was 45 first and second year students from English for International Communication program and 45 first and second year students from Hospitality program from the Faculty of Liberal Arts, Rajamangala University of Technology Srivijaya who enrolled in a Chinese course in the 2013 academic year and were selected by purposive sampling. The instrument used in this study was a learning style questionnaire adapted from the Reid theory. The result showed that 1) the highest mean score of students' learning style in studying Chinese was group learning style, followed by individual learning style, auditory learning style, and visual learning style. The lowest mean score of students' learning style in studying Chinese was tactile learning style, 2) there were no significant differences in learning styles according to gender 3) there were significant differences in learning styles in studying Chinese according to year at .05, 4) students from different majors had significantly different learning styles in studying Chinese at .05. English for International Communication students' Chinese learning style preference was individual learning style whereas Hospitality students' Chinese learning style preference was group learning style.

Keyword: Learning styles, Chinese, learning style preference

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## **Introduction**

Higher education aims to promote learners' cognitive and affective domains and especially focuses on learner differences. The best learning process is from the learners themselves whereas teachers' duties are to provide the learning process and the environment for them. In terms of individual difference, teachers must realize the different needs of the learners especially individual learning style. Bogue (1974:150) mentioned that each particular learner has his/her own learning style; for example, some learners can learn best by reading, self- studying under the teacher's recommendation while others can learn best by discussion and sharing with peers. This is also agreed by Pitoon Sillarat (1982) who claimed that learning styles are strongly involved with individual differences; learners have differences among themselves: interests, abilities, thinking, feeling, needs, and their preferred learning styles and these influences the learning styles of the learners.

Only one teaching approach may be effective and successful with some learners whereas some may not succeed with that particular teaching style, so teachers should have a variety of teaching styles to serve the learners' needs. Teachers, in fact, lack the survey process to explore learning styles of learners and this could finally affect the learning process of learners in the classroom. Dum, Dunn & Perrin (1994:10) cited that the consistence the learning styles and teaching styles greatly affect the learners' achievement than those with an inconsistence style. Based on previous studies both in Thailand and abroad, they indicate that the teaching and learning process should be consistent with the learning styles of learners.

Teaching Chinese is one mission of the teaching and learning process administered by the Faculty of Liberal Arts, Rajamangala University of Technology Srivijaya, but the learning styles of learners studying Chinese have not been explored and surveyed yet. Hence, the researcher, as the Chinese lecture was interested to survey the learning styles of learners in studying Chinese. The significance of this study could benefit the Chinese teaching and learning process in adjusting them to meet the learners' variety in the classroom, enhance their achievements, and to produce qualified graduates for society.

### **The purposes of the study**

1. To explore the learning styles of Chinese learners at Rajamangala University of Technology Srivijaya.
2. To compare the learning styles of Chinese learners divided by gender, year of study and the program of study.

### **Hypothesis of the study**

Chinese learners at Rajamangala University of Technology Srivijaya have different learning styles divided by gender, year of study and the program of study.

## **Conceptual framework of the study**

The learning styles in this study is based on Reid (1987) which are visual learning style, auditory learning style, kinesthetic learning style, tactile learning style, individual learning style, and group learning style.

### **Learning styles**

#### **Definition of learning styles**

Kolb (1981:375) stated that genes, past experience, and environmental need form individual differences and four types of learning in an Experiential Learning Theory: concrete experience, reflective observation, and abstract conceptualization.

Dunn et al. (1981:374) defined learning styles as the integration of learners' thought in which way they prefer to study and an environmental, emotional, sociological, and physical aspect have an impact of learning styles.

#### **Types of learning styles**

The learning theory of Reid (1987) has been used in this study that divided into 6 learning styles based on perception and function.

1. Visual learning style. This type of learner can learn best by seeing pictures and language; for instance, reading books, reading maps, diagrams, pictures, video, announcement board, and movies etc.
2. Auditory learning style. This type of learner can learn best by hearing or listening; for example, listening to the lecture, conversation, audiotape, and discussion.
3. Kinesthetic learning style. This type of learner can learn best by moving in the simulation or the assigned scenarios: for instance, role play activity, drama, interview, experiential learning, and collaborative learning.
4. Tactile learning style. This type of learner can learn best by doing: for example, creating a model, experimenting in the laboratory, and learning by touching: notebook and word cards.
5. Individual learning style. This type of learner can learn best by oneself both in the classroom and outside the classroom to achieve one's learning goal.
6. Group learning style. This type of learner can learn best work cooperatively with others in both a pair and group work.

## **Research Methodology**

### **The scope of the study**

#### **1. Population and sample**

The population was the 1<sup>st</sup> and 2<sup>nd</sup> year undergraduate students of Rajamangala University of Technology Srivijaya who enrolled in Chinese courses in 2013 academic year.

Purposive sampling was used in this study. The sample groups were the 1<sup>st</sup> and 2<sup>nd</sup> year undergraduate students of the Faculty of Liberal Arts, Rajamangala University of

Technology Srivijaya majoring in English for International Communication, 45 students, and those majoring in Hotel Management, 45 students. Those enrolled in Chinese courses in the 2013 academic year.

## **2. Variables in this study**

The independent variables were gender, year of study, and the program of the study. The dependent variable was the Chinese learning styles.

## **3. Duration of the study**

The duration of the study took two semesters: 1<sup>st</sup> and 2<sup>nd</sup> semester of 2013 academic year.

## **4. Research instruments**

The research instrument was a questionnaire surveying the students' learning styles in studying Chinese at Rajamangala University of Technology Srivijaya. The questionnaire consisted of three parts as follows;

1<sup>st</sup> part of the questionnaire surveyed the general information of the students is the check list items.

2<sup>nd</sup> part of the questionnaire surveyed the students' learning styles in studying Chinese with a five- rating scale defined as follows;

5	strongly agree
4	agree
3	Neutral
2	disagree
1	strongly disagree

3<sup>rd</sup> part of the questionnaire was open- ended questions asking students to express their opinions and suggestion in learning Chinese

## **Research instrument construction and quality**

1. To set the objectives in constructing the questionnaire.
2. To review and study literature and related studies of learning styles based on Reid (1987).
3. To plan constructing the questionnaire.
4. To construct the students' learning styles in studying Chinese.
5. To find valid content by asking experts to evaluate the items in the questionnaire.
6. To revise the items according to the experts' recommendations. To try out the questionnaire with the 3<sup>rd</sup> year undergraduate students majoring in English for International Communication, 30 students.
7. To again revise and qualify the items of the questionnaire.
8. To prepare the completed questionnaire for data collection.

## **5. Data collection**

The researcher collected the data by following the steps below.

1. Contact the target sample group.
2. Set the date, time, and venue.
3. Prepare the questionnaire.
4. Inform the sample group about the purpose and benefit of the study.
5. Explain to the sample group of how to complete the questionnaire.
6. Collect data in the second semester, academic year 2013.
7. Check the questionnaire after the completion and bring the data from the questionnaire to analyze.

## 6. Data Analysis

The SPSS program is used to analyze the data for descriptive statistics- percentages, mean, and standard deviation.

## 7. Findings

### General information

There were 90 respondents to the questionnaire which comprised of 76 female respondents (84.4%) and 26 male respondents (15.6).

In terms of their year of study, the respondents comprised of 45 1<sup>st</sup> year undergraduate students (50%) and 45 2<sup>nd</sup> year undergraduate students (50%).

In terms of their program of the study, the respondents comprised of 47 undergraduates majoring in English for International Communication (52.2%) and 43 undergraduates majoring in Hotel Management (47.8).

### The data analysis of learning styles

The learning styles in this study consisted of 6 types.

Learning style	Level of learning styles		
	$\bar{X}$	S.D.	Result
visual learning style	3.59	.39	Agreed
auditory learning style	3.61	.40	Agreed
kinesthetic learning style	3.58	.44	Agreed
tactile learning style	3.58	.44	Agreed
individual learning style	3.70	.42	Agreed
group learning style	3.78	.33	Agreed
Total	3.64	.25	Agreed

Figure 1: The Learning styles of all students.

According to the table shown above, the respondents all agree to their learning styles in each type. Considering each style, group learning style has the highest mean followed by individual learning style, auditory learning style, and visual learning style whereas kinesthetic learning style and tactile learning style have the lowest mean.

### Data analysis of learning styles divided by gender, year and program of study

Opinion	Gender				T	P-value
	Male		Female			
	$\bar{X}$	S.D.	$\bar{X}$	S.D.		
visual learning style	3.62	.33	3.59	.40	.318	.751
auditory learning style	3.48	.30	3.63	.41	1.298	.198
kinesthetic learning style	3.54	.38	3.58	.46	-.355	.723
tactile learning style	3.57	.41	3.58	.45	-.078	.938
individual learning style	3.77	.32	3.69	.43	.642	.522
group learning style	3.72	.26	3.79	.34	-.659	.512
Total	3.62	.19	3.64	.26	-.349	.728

Figure2: Learning styles of each gender

For the male students, the highest mean score was individual learning style, followed by group learning style. For the female students, the highest mean score was group learning style, followed by individual learning style.

Opinion	Year of study				T	P-value
	1 <sup>st</sup> year		year2 <sup>nd</sup>			
	$\bar{X}$	S.D.	$\bar{X}$	S.D.		
visual learning style	3.60	.37	3.59	.41	.160	.873
auditory learning style	3.49	.36	3.73	.40	-2.952	.004*
kinesthetic learning style	3.55	.44	3.61	.45	-.655	.514
tactile learning style	3.53	.41	3.62	.47	-.989	.326
individual learning style	3.65	.41	3.75	.43	1.148	.254
group learning style	3.76	.34	3.80	.31	-.635	.527
Total	3.59	.27	3.68	.22	-1.658	.101

Figure3: Learning styles of each year of study

For the first year students, the highest mean score was group learning style, followed by individual learning style. For the second year students, the highest mean score was group learning style followed by individual learning style.

Opinion	Program of study				T	P-value
	English for International Communication		Hotel Management			
	$\bar{X}$	S.D.	$\bar{X}$	S.D.		
visual learning style	3.73	.36	3.44	.36	3.743	.000*
auditory learning style	3.62	.37	3.60	.43	.195	.846
kinesthetic learning style	3.68	.40	3.47	.47	2.225	.029*
tactile learning style	3.61	.39	3.53	.50	.819	.415
individual learning style	3.82	.39	3.57	.41	2.845	.006*
group learning style	3.80	.33	3.76	.32	.531	.597
Total	3.71	.22	3.56	.27	2.807	.006*

Figure4: Learning styles of students in each program

For English majors, the highest mean score was individual style, then group learning style. For Hotel Management, the highest mean score was group learning style followed by auditory learning style.

## 8. Discussion

### The Chinese learning styles of students at Rajamangala University of Technology Srivijaya

The findings indicate that the undergraduate students have the greatest mean on a group learning style. This type of learner can learn best by working in pairs and a group. This is consistent with the findings of Rungfha Kitiyanuson (2006:57-58) which she found that the majority of the sample tend to have a group learning style. Teachers should facilitate this type of learning style by providing them group work or team work. Teachers can use the Problem Base Learning and the Project Base Learning to promote their learning style. A student-centered approach is suitable with students having a group learning style. Teachers should adapt their role from being a teacher into a facilitator who promote and encourage the students to learn (Office for Educational Reform, 2002: 5-12).

The second greatest mean ranking on the learning styles is an individual learning style. This type of learner can learn the best by themselves both in the classroom and outside the classroom to achieve their learning goal. This finding is consistent with the findings of Kanokporn Sriyanaluck (2008:15-16) who found have an independent learning style. She claimed that students having an independent learning style are able to acquire and learn best by themselves, hear and accept others' opinion, be attentive and confident in their study. They prefer learning by themselves rather than group work.

Next comes auditory learning style, students with this style are able to learn best by listening; for example, listening to the lecture, conversation, videotape recording, and discussion. In addition, this type of learner can learn best by listening and working in groups simultaneously through the conversation and discussion. Learning Chinese, students also need to use listening skills to acquire the target language, so that is why

some of the Chinese language learners have an auditory learning style. This concept is consistent with the Chinese learning promotion policy that aims to realize and promote collaboration in learning Chinese. The main targets are groups of students and working people to be able to effectively use Chinese for communication (Uthaiwan Chalermchai, 2005: 7-11). Moreover, it is obviously seen that communicative skills are essential for language learners.

Fourth, visual learning style, was found that the undergraduate students have the fourth greatest mean ranking in this style. They prefer learning best by seeing and reading: reading books, maps, diagrams, pictures, visual aids, announcement board, and movies. The finding is consistent with the findings of Yanisa Booranachaithawee (2004: 81) who surveyed the learning styles of students majoring in Linguistics, Faculty of Humanities, Srinakharinwirot University. The majority of students use visual, verbal and nonverbal whereas they seem to have less visual learning style because they might learn linguistics through acting and moving rather than learning from theory.

Lastly, some undergraduate students have an equal mean of learning styles: kinesthetic and tactile learning style. Learners having a kinesthetic learning can learn best by moving in simulations or assigned scenarios: for instance, role play activity, drama, interview, experiential learning, and collaborative learning whereas learners having a tactile learning style are able to learn best by doing: for example, creating a model, experimenting in the laboratory, and learning by touching: notebook and word cards. These two types of learning style are quite similar as they required learners to act and do in the learning process, but these learning types were the last ones that students have. This could be the reason that they are so worried in doing and expressing when learning the Chinese language.

### **Chinese learning styles of undergraduate students divided by gender, year and program of study**

Comparing the learning styles of students divided by gender, there is significantly no difference of learning styles between male and female undergraduate students. It can be assumed that the learning behavior of male and female undergraduate students are quite comparable. This finding is consistent with the findings of Jongkol Poonsawat (2003: abstract) who surveyed the learning styles of students from the Faculty of Education, Kasertsart University. The result revealed that there was no different learning styles of male and female students so teachers may pay less attention to the gender factor in the teaching and learning process.

Comparing the learning styles of students divided by year of study, there is a significant difference in learning styles between the 1<sup>st</sup> and 2<sup>nd</sup> year students. 2<sup>nd</sup> year undergraduate students have a greater mean in auditory learning style. This could be explained by the 2<sup>nd</sup> year students have much more Chinese language skill than the 1<sup>st</sup> year students, so they could listen well through conversation and discussion activities whereas the 1<sup>st</sup> year students have less Chinese competence, so they not able to listen and express the language well and this might influence their learning aptitudes. Other reasons affecting the difference of learning style between the years of study are personality traits, psychological and environmental aspect. This claim is consistent with the findings of Rattanaporn Pinkaew et al. (2013: 162) who surveyed

the learning styles of undergraduate students and found that there was no difference in learning styles between years of study of the learners.

Comparing the learning styles of students divided by the program of the study, there is a significant difference of learning styles between students majoring in English for International Communication and those majoring in Hotel Management. Students majoring in English for International Communication have the greatest mean in an individual learning style as students need to search and study by themselves in the Chinese courses whereas those majoring in Hotel Management have the greatest mean in a group learning style as they need group participation and group work. This could imply that the characteristic of the subject indirectly affects the learning styles of learners and it is consistent with the findings of Kanokporn Sriyanrat (2008: 16-22) who surveyed the Chinese learning styles of students and found that there was a difference between avoidance and cooperative learning styles. This could be caused by the Chinese content in an elective course and a minor course are more intensive than an elective course. This is consistent with the findings of Chirawan Panputtharat (2008: 1) who surveyed the learning styles of undergraduate students in the Faculty of Science and Technology. The results revealed that there was a significant difference between the program of study of the learners.

## **9. Conclusion**

The results from this study indicate that there is a variety of learning styles of students, so teachers should provide suitable teaching and a learning process for them. Overall, the majority of the sample group have a group learning style that they can learn best by grouping or learn by team work. As a result, teachers should provide them language learning through group work or pair work activities, but teachers need to be aware of the other factors, year and the program of study, when conducting the teaching in order to meet the learning effectiveness of the learners.

## **10. Suggestions for further studies**

1. A survey of other learning styles based on other theories is recommended in order that teachers are able to know other aspects of students' learning styles.
2. Surveys on the learning styles of students who learn other languages are suggested, and to compare the similarity and differences between them.
3. A correlational study should be conducted between the teaching styles of teachers and learning styles of students.
4. Surveys on the learning styles of students in another majors should be conducted in order to find suitable ways and methods to promote their Chinese learning.
5. Surveys on the learning styles of students who learn the Chinese language in another universities is recommended, and the benefit of the study could enlighten teachers in administering and providing learning to students effectively.

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