

การสำรวจหารูปแบบการเรียนรู้ของนักศึกษาคณะสถาปัตยกรรมศาสตร์ เพื่อนำไปใช้ในการปรับปรุงรายวิชาและการเรียนการสอน

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บทคัดย่อ

งานวิจัยนี้สร้างขึ้นเพื่อค้นหารูปแบบการเรียนรู้ (learning styles) ของนักศึกษาคณะสถาปัตยกรรมศาสตร์ ชั้นปีที่ 1 เพื่อศึกษาว่าหลักสูตรและบทเรียนที่ได้จัดเตรียมให้ นั้นเหมาะสมกับรูปแบบการเรียนรู้ของนักศึกษาหรือไม่ โดยรูปแบบการเรียนรู้คือรูปแบบที่เกี่ยวกับกระบวนการคิด ซึ่งเป็นตัวกำหนดวิธีการรับรู้ การคิด และการแก้ปัญหาของบุคคลนั้นๆ รูปแบบการเรียนรู้ที่พัฒนามาจากทัศนคติ ความชอบ หรือลักษณะนิสัยประจำตัวของบุคคลนั้น ผู้ทำวิจัยได้จัดทำแบบสอบถามเกี่ยวกับรูปแบบการเรียนรู้ โดยปรับปรุงจากแบบสอบถามของวิลลิง [1] เพื่อใช้เป็นเครื่องมือในงานวิจัย จากการวิจัยค้นพบว่า นักศึกษาสถาปัตยกรรมศาสตร์ โดยทั่วไปเป็นผู้เรียนแบบคอนกรีต (concrete learners) คือเป็นผู้ที่ชอบทำงานในกลุ่มเล็กโดยใช้เกมส์และรูปภาพ นักศึกษาเหล่านี้ยังชอบเรียนโดยการปฏิบัติอีกด้วย ข้อมูลที่ได้ค้นพบไม่เพียงแต่ช่วยให้ผู้วิจัยทราบรูปแบบการเรียนรู้ของนักศึกษาเท่านั้น แต่ยังสามารถนำข้อมูลไปใช้ในการปรับปรุงพัฒนาวิชาภาษาอังกฤษให้เหมาะสมกับนักศึกษาคณะสถาปัตยกรรมศาสตร์ต่อไป

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A Survey of KMUTT Architecture Students' Learning Styles : An Implication to Course Development and Classroom Teaching

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Abstract

This study was conducted to find the learning styles of the first year Architecture students in order to see if the curriculum and materials provided cater for their learning styles. Learning styles are regarded as cognitive styles which determine an individual's mode of perceiving, thinking and problem solving. They are conceptualised from stable attitudes, preferences or habitual strategies. The learning styles questionnaire by Willing [1] was adapted and used as a research instrument. It was found that generally the Architecture students were concrete learners who like to learn in groups through games and pictures. They also like to learn by doing. The findings not only give more insight into the students' learning styles, they can also be used to improve and/or develop the English courses suitable for the Architecture students.

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1. Introduction

According to the Thai National Education Act [2], in organising the learning process, educational institutes should:

- 1) provide content and activities which relate to learners' interests and aptitudes based on individual differences;
- 2) provide training in thinking processes so that the learners know how to solve problems;
- 3) organise authentic activities and have chances to think critically;
- 4) achieve in all subjects and be able to integrate them;
- 5) create an environment where the students can learn from different types of teaching, media and other sources;
- 6) enable the learners to learn cooperatively from the community.

From the above statements, it can be summarised that the curriculum should focus on the learners' needs. Learners should be prepared to process at least 3 aspects of ability: ability to think, ability to communicate and ability to manage. Learners should learn thinking processes such as analytical, logical and critical thinking skills, etc. They should learn how to express their ideas effectively. Moreover, learners should practise how to learn by themselves.

The Department of Language, School of Liberal Arts, King Mongkut's University of Technology Thonburi (KMUTT) has prepared Fundamental English Course LNG 101 for the first year KMUTT undergraduate students to serve the objectives as mentioned above. Also the curriculum of the course aims to give learners a chance to practise skills of learning through various tasks. The process of learning is emphasized as well as the product through tasks. In the curriculum, a task is regarded as an activity which is meaningful and contains some communicative problem to solve in order to create a real purpose for language use. However, most Thai learners are familiar with product-focused learning. They have to produce the exercises assigned to them in correct grammar. The teachers do not pay much attention to the process of learning and seldom provide varieties of classroom activities for them. By using the task-based approach as the new curriculum, we try to arrange teaching materials and tasks to suit the nature and characteristics of KMUTT students. We believe that this is the key factor that helps our students to learn better.

After having taught Engineering and Science students for over ten years, we have learnt quite a lot about their nature and their styles of learning. For this reason, it is not difficult for us to prepare and arrange tasks for them. However, Architecture students are quite new to us, we have taught them

for a few years, and found out that we have not been quite successful in teaching them even though we try to arrange special courses for them. Their nature and their learning styles are rather different from those in Engineering and Science Faculties. From our experiences and informal observation, most of the Architecture students were quite good at English but they did not pay much attention to the English courses provided and did not take them seriously. Even though, they had a good chance to be exposed to foreign teachers and used English as a medium for their international study programme. According to the observations, they did not like to be controlled and enjoyed learning by their styles. It is hypothesised that architecture students were demotivated partly because the English courses prepared for them might not suit their needs. Therefore, this study was conducted to find Architecture student's learning styles so we can arrange tasks or prepare materials to suit them.

2. Literature Review

Learning styles are 'internally based characteristics', often not perceived or consciously used by learners, for the intake and comprehension of new information' [3]. Learning styles can be regarded as cognitive styles which determine an individual's mode of perceiving, thinking and problem solving since they are conceptualised from stable attitudes, preferences or habitual strategies [4]. With reference to language learning context, Scovel [5] thinks that certain learning styles might help learners to be more effective in dealing with certain language tasks. Learning style preferences are stable but they can be 'stretched' [6] so that the learners can benefit from the task they deal with. Oxford and Ehrman [7] also suggest that learners need to be extended beyond their 'stylistic comfort zone' but this has to be done gradually and in a sensitive manner.

Learning styles can be regarded as the Seven Multiple Intelligences; namely, verbal/linguistic, musical, logical/mathematical, spatial, visual, bodily/kinesthetic, interpersonal and intrapersonal. They can be classified according to the perception as visual, auditory, tactile, kinesthetic, group and individual. Another type of learning styles which are frequently mentioned is Myers-Briggs Type Indicator (MBIT). They separate learning styles into extraversion-introversion, sensing-perception, thinking-feeling and judging-perceiving [8][9]. The learning style model which is widely regarded is Kolb's Experiential Learning Model which separates learners into four types: converger is the learner who learns effectively when s/he perceives abstractly and processes actively, the diverger learns effectively when s/he perceives concretely and processes reflectively, the assimilator learner perceives abstractly and processes reflectively, and the accommodator perceives concretely and processes actively [10].

Regarding the application of style to language learning, field independence (FI) and field dependence (FD) which Witkin and Moore [11] developed seem to be the main concept. FI/FD is a cognitive style derived from perceptual processing. Field independent learners are analytic individuals who tend to analyse the linguistic material, its components and explore relationships between these components. They benefit from how they process information but they may avoid situations where language is used for communication. Field dependent learners, on the other hand, are more holistic as they perceive situations as wholes. They tend to rely on other people's opinions as a reference for making judgements. They are comfortable in interaction situations in order to receive relevant input and use language to express meanings.

Separating learners into two types is seen as an extreme which is not so good on the people in the middle of the field independence/dependence continuum [12]. It is also regarded as a fixed concept because people may have different styles which can be adapted to the task they are encountering. Brown [13] points out that we should look at both where the learners are placed on the continuum and how flexible they are. According to Hedge [14], more recent research has looked at learning styles as one variable contributing to successful language learning.

In this study, the researchers adopted the learning style inventory constructed by Willing [1] who interpreted Kolb's Experiential Learning Model [10] which is abstract-concrete dimensions as field dependence and field independence [1]. Willing constructed an empirical research study with adult migrants in Australia and created the two-dimensional framework to explain four types of language learning as seen in the following figure.

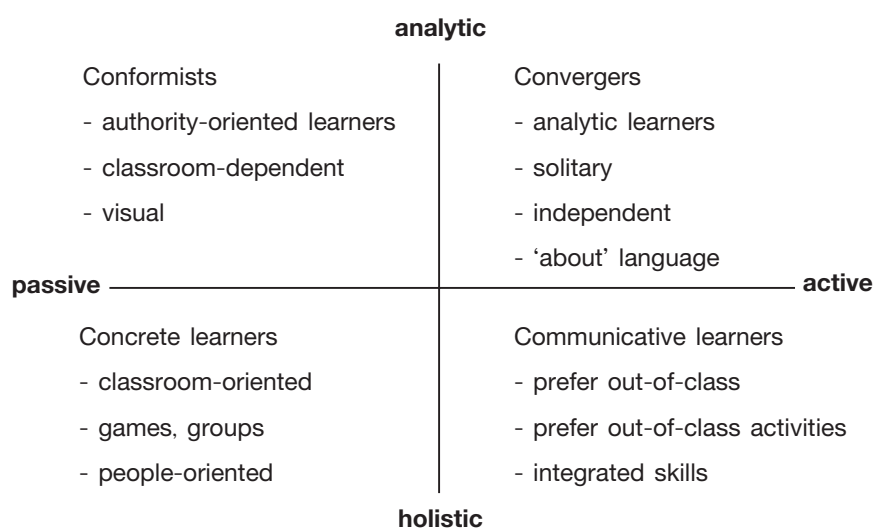


Fig. 1 Willing's two dimensional framework of learning style [12]

Convergers (analytical) are field independent active learners who are analytical when processing material. They avoid the group or classroom as they are considered solitary and independent learners. They regard language as a subject so they tend to learn 'about' language, not language use. Since the convergers can plan and link to the availability of materials, they can learn well in the self-access learning mode.

Conformists (authority) are field independent passive. They are analytical learners who also prefer learning 'about' language as the convergers but they are dependent on others who they perceive as having authority. Therefore, they can be happy in a non-communicative classroom where they are told to learn by well-organised teachers who provide a learning structure through classroom organisation and plans.

Concrete learners are field dependent passive learners. They like the classroom and authority as do the conformists. As well, they enjoy the social aspects of classrooms. Therefore, they are comfortable in group work activities. Concrete learners like to learn from direct experience and regard language as communication. They prefer activities which are skill-based and communicative.

Communicative learners are field dependent active learners who are holistic-oriented. Since they are interested in language use, they prefer out-of-class activities where they are willing to take risks communicating in real-life situations without the support and guidance of a teacher. Since they are holistic, they are multi-skilled and not interested in an analytic approach or in learning the elements of a language separately.

Richard and Lockhart [15] suggest that it is useful to identify approaches to learning students prefer and how teaching can accommodate their learning preferences because learners have different preferences of learning styles, so they learn best when the learning condition suits their learning preference.

3. Research Questions

Based on the problems, changes in national educational acts, our own curriculum and also theoretical aspects, the researchers aimed to find out the answers of these following questions:

1. What are the classroom activities and tasks they prefer?
2. What are the learning styles of the Architecture students?

4. Subjects and research instrument

The subjects were 63 first year Architecture students who enrolled in English courses in the first semester (2001). It should be noted that this study was conducted from the problems arising from designing the English courses for the Architecture students at KMUTT. Thus, the researchers were particularly interested in the Architecture students at KMUTT. The results of the study cannot be generalised to other groups of students.

The researchers used the questionnaires (see Appendix 1 and 2) which were adapted from Willing [1]. The reasons of adaptation were because Willing used his questionnaires with the migrants whose language learning context was in a foreign country i.e. Australia. Therefore, some questions were not appropriate for the Thai context. As a result, the researchers needed to change and adapt some of them but still keep the same meanings and objectives. The questionnaires were translated and piloted before distribution to the students in the second week of the semester. They had to finish it in class and return it to their teachers.

The questionnaire consists of 30 statements. Every statement represents and indicates learning styles of the students, namely: analytical, authority-oriented, concrete, and communicative styles. In addition to learning styles, the statements were categorised into 6 groups covering factors affecting teaching and learning process. They were: classroom activities, teacher behaviour, language study group, aspects of language to be emphasised, sensory modality option and outside class activities. The students have to tick on the rating scale of each statement by preference.

5. Data Analysis

Once the questionnaires were collected, the researchers analysed the data by counting the number of responses and find the average mean of each statement. Then the researchers grouped the statements into 6 categories which were mentioned earlier in order to be able to interpret activities or tasks which suited the architecture students. Each statement of each category also indicates learning styles of the students. Ranking technique was used in order to find out the learning styles the architecture students allocated to.

6. Results and Discussion

The results are presented in two main parts. The first part which is shown in Fig. 2 focuses on the activities that the Architecture students preferred to study in classrooms in order to answer the first research question on 'what are classroom activities and tasks they prefer?'. The second part of

the findings reports the ranking of the activities and the style types in order to answer the second research question on ‘what are the learning styles of the Architecture students?’ The findings are presented in Table 1.

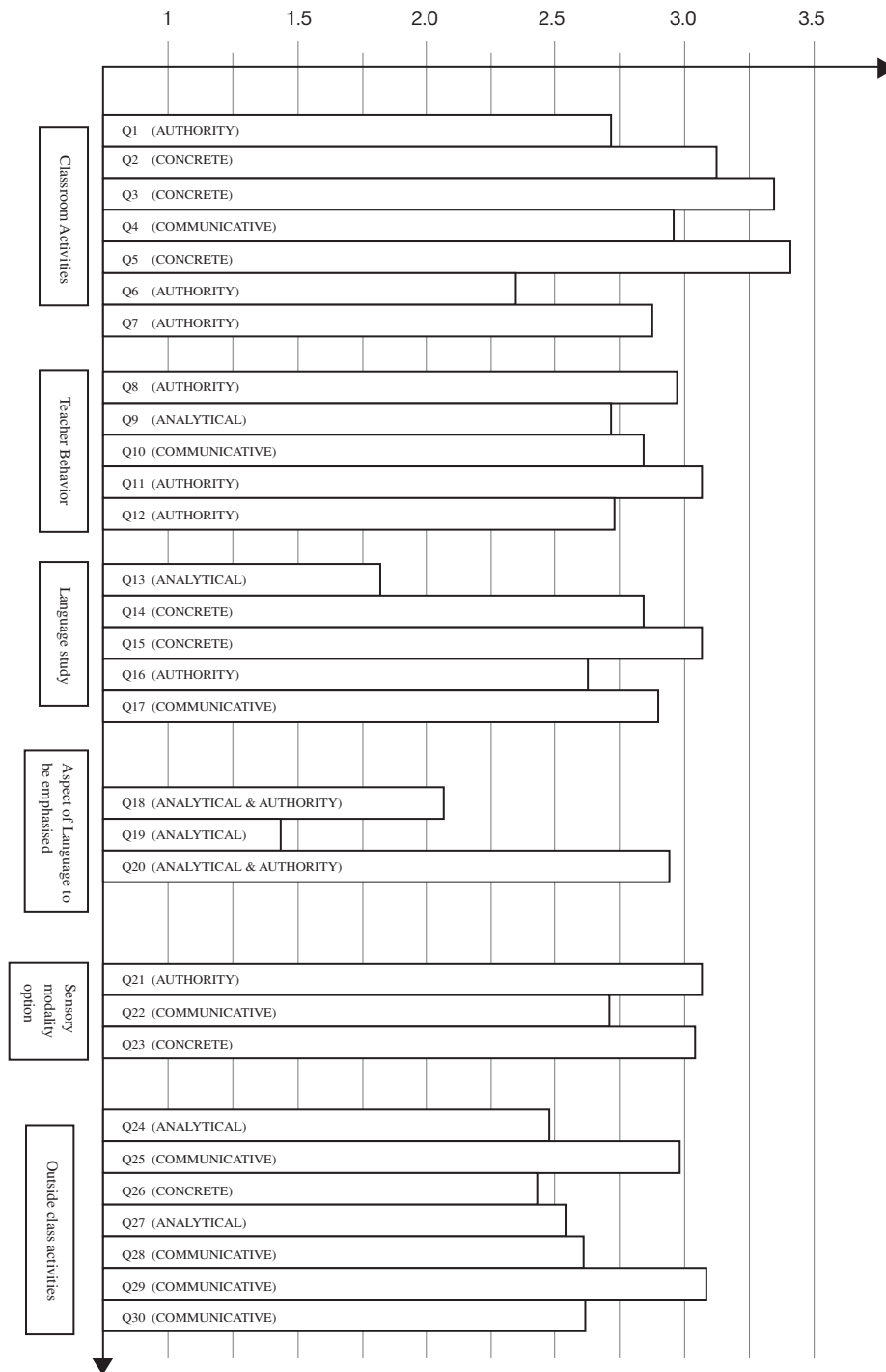


Fig. 2 Ranking the mean values of activities

From Fig. 2, we found that in Category 1 (Classroom Activities), the first three activities which obtained highest scores were “In class, I like to learn by pictures, films, video.” (3.35), “In class I like to learn by playing games.” (3.30) and “In class, I like to listen and use cassettes.” (3.18). For Category 2 (Teacher Behaviour), we learned that the students preferred the teachers to do the following activities: telling them all their mistakes (3.07), explained everything to them (2.97) and talked about their interests (2.79). In terms of Language Study Group, it was found that the students liked to learn English in a small group (3.09) and liked to go out and have a conversation with foreigners (2.88). This shows that the Architecture students enjoy working in a group and interact with other people. The result of Item 13, “I like to study English by myself (alone)” can support this interpretation, as the mean score is only 1.79.

Regarding Category 4, Aspects of Language to be Emphasised, the mean scores of this category which emphasizes analytical and authority-oriented learning styles were not high. The highest one, practising sound and conversation, is 2.89 and the lowest is learning many new words (1.42). It implies that the Architecture students are not interested in learning language in terms of rules or a large chunk of vocabulary. We will discuss later on how the teachers can prepare appropriate tasks for the students.

For sensory modality options, the mean scores of the three activities of this type were quite high, the students tend to learn English words by “seeing them.” (3.09), “doing something.” (3.06) and “hearing them” (2.72). All of which belong to concrete learning styles. The final category to be discussed here is Outside Class Activities. The scores of the activities in this group are slightly above average. However, the highest score is 3.15 (I like to learn by watching and listening to native speakers.) and the second rank is 2.97 (At home, I like to learn by watching TV in English.). The findings of this group indicate that the Architecture students enjoy learning language through the use of media which provides an opportunity for them to see and listen to it; this supports the findings from sensory modality options.

The results from Fig. 2 indicate types of activities the students preferred to study. It shows that the students are motivated in learning from hands-on, interactive, communicative activities in a small group. Especially, they preferred to learn the activities where they have an opportunity to see either in the form of pictures or written texts. It can be said that the Architecture students are to some extent independent learners; however, they need the teachers to give a clear explanation whenever they need it. In addition, they neither like to study grammar nor vocabulary.

Table 1 Score ranking of activities and learning style types of the subjects

No.	Activity	Learning Style Type	Mean
1	In class, I like to learn by pictures, films, video.	Concrete	3.35
2	In class, I like to learn by playing games.	Concrete	3.30
3	In class, I like to listen and use cassettes.	Concrete	3.18
4	I like to learn by watching and listening to native speakers.	Communicative	3.15
5	I like to learn English in a small group.	Concrete	3.09
6	I like to learn English words by seeing them.	Authority-oriented	3.09
7	I like the teacher to tell me all my mistakes.	Authority-oriented	3.07
8	I like to learn English words by doing something.	Concrete	3.06
9	I like the teacher to explain everything to us.	Authority-oriented	2.97
10	At home, I like to learn by watching TV in English.	Communicative	2.97
11	In class, I like to learn by having conversations.	Communicative	2.95
12	I like to practice sounds and pronunciation.	Analytical & Authority-oriented	2.89
13	I like to go out and have a conversation with foreigners.	Communicative	2.88
14	I like to have my own textbook.	Authority-oriented	2.86
15	I like to learn English by talking in pairs.	Concrete	2.82
16	I like the teacher to help me talk about my interests.	Communicative	2.79
17	I like the teacher to let me find my mistakes.	Analytical	2.74
18	In English class, I like to learn by reading.	Authority-oriented	2.73
19	I like the teacher to give us problems to work on.	Analytical	2.73
20	I like to learn English by hearing it.	Communicative	2.72
21	I like to learn English with the whole class.	Authority-oriented	2.67
22	I like to learn English by using the Internet and contacting foreign friends via e-mails.	Communicative	2.64
23	I like to learn by talking to friends in English.	Communicative	2.62
24	At home, I like to learn by studying English book.	Analytical	2.56
25	At home, I like to learn by reading newspapers, etc.	Analytical	2.44
26	At home, I like to learn by using cassettes.	Concrete	2.42
27	I want to write everything in my notebook.	Analytical	2.36
28	I like to study grammar.	Analytical & Authority-oriented	2.08
29	I like to study English by myself (alone).	Analytical	1.79
30	I like to learn many new words.	Analytical & Authority-oriented	1.42

As shown in Table 1 which presents the subjects' preferences of the learning activities, the 8 highest ranked activities are as follows.

1. In class, I like to learn by picture, films, video (3.35)
2. In class, I like to learn by playing games. (3.30)
3. In class, I like to listen and use cassettes. (3.18)
4. In class, I like to learn by watching and listening to native speakers. (3.15)
5. I like to learn English in a small group. (3.09)
6. I like to learn words by seeing them. (3.09)
7. I like the teacher to tell me all my mistakes. (3.07)
8. I like to learn English words by doing something. (3.06)

From the above findings, it is interesting to discover that six from eight activities represent concrete learning styles, while the other two are authority-oriented styles. It is very common for learners to have more than one learning style. However for Architecture students, this finding possibly indicates that their dominant learning style is the concrete style. In other words, the students enjoy learning language in class or in a group by doing activities and using materials which they can see, listen and participate in. It also represents characteristics of architects who learn by seeing and doing. While the concrete style is the dominant style of Architecture students, analytical and authority-oriented styles seemed to be the least influential ones to them as the scores of the activities No.28, 29, and 30 were about 2.00 or lower than 2.00.

7. Implications

1. Task characteristics and the materials.

As Architecture students like learning by doing and also like to learn through games, the materials and the tasks given to them should help students to do/practise things by themselves. Moreover, the teacher should provide or have students provide materials and/or tasks which are fun, interesting and realistic to them. There are many activities lending themselves for these purposes such as role plays, simulations in various situations even game shows on TV, and so on.

Since Architecture students like to see and listen to foreigners while learning, and also like to search for materials or information by themselves, the tasks should concern materials and information from a variety of media/resources such as the Internet, films, video/audio programmes or even interviewing foreigners. Cohen [16] supports this idea as he mentions that for the learners whose

learning styles are concrete and visually oriented, they may choose to create a series of mental pictures, thus using newspaper, pictures, TV and media will be the best alternative for the teachers.

Architecture students do not like to work alone; they want to work with their friends, so the mode of learning should be in pairs, or in small groups sometimes, and the tasks should allow them to exchange the ideas or information they have searched both from outside and inside the classroom.

2. Roles of learners and teachers

Ideally, most of the teachers expect their students to be autonomous learners. However for the Architecture students the findings obviously indicate that they need the teachers at the beginning stage especially if they are the first year students. The teachers do not need to be with them or help them all the time but may act as consultants. They preferred not to work or self-study at home thus the teachers should not give Architecture students many assignments to do at home. The main focus of the task should take place in class so they can work, exchange ideas and information with their friends. In doing so, it can be said that the roles of the learners can be that of consultants, co-workers and interlocutors.

With regard to teachers' roles, according to the findings, Architecture students like their teacher to work with them sometimes. This can be implied that they want their teacher to take the role of a facilitator. Although they want to work on their own, they need their teacher to help them when they have problems. They may need their teacher to help them summarize or conclude the ideas, rules, or knowledge they have learnt. This can be done after finishing the task. To respond to their styles of learning, the teacher should encourage the students to summarize or conclude what they have learned on their own. The degree of help from the teacher should be reduced gradually, so they can be independent learners in the future.

3. Stretching students' learning styles

Reid [8] and Cohen [6] suggested that teachers should encourage their students to 'stretch' their learning styles so that the students can learn effectively in various learning situations. An example of helping the learners to stretch their learning style is by providing materials that cater for other sensory modes instead of always providing an opportunity for the learners to learn visually when they are identified as visual learners. The findings indicate that the Architecture students were concrete learners; however, studying in an international programme requires them to use language to

express their ideas effectively. If the students are able to analyse the language use while learning, it can help them to develop English proficiency by themselves. This quality belongs to analytical-oriented students. Therefore, it is necessary to encourage the Architecture students to 'stretch' their learning styles to be more analytical. Activities that focus on language awareness such as discussing their language use or problems about grammar can help them learn 'about' language in a more meaningful way. Also, helping the students to monitor their language use when writing or doing oral presentations can also enhance their analytical skills. However, these activities should be first introduced in pairs or groups because the students do not like to learn independently. Stretching student's learning styles or taking them out of their comfort zone is a delicate procedure. The teacher should provide both psychological and methodological preparation/support for the students to deal with the situation successfully.

8. Conclusions

This study aimed at investigating the Architecture students' learning styles in order to understand the context where they learn English effectively. It was found that the Architecture students liked to learn in groups through games and materials that they could study visually. In addition, they liked to learn by doing. Their dominant learning style is concrete. Therefore, the recommendations for designing an English course for the Architecture students cover tasks and materials, roles of teachers and learners and how to help the learners stretch their learning styles so that they will also be able to deal with the tasks which are not catered for their learning styles.

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Appendix 1 : แบบสอบถามเพื่อหารูปแบบการเรียนรู้ (Learning Styles) ของนักศึกษา

ชื่อ _____ นามสกุล _____
 อายุ _____ เพศ _____
 จบมัธยมปลายจากโรงเรียน _____
 เรียนภาษาอังกฤษมา _____ ปี

จงวงกลมล้อมรอบคำตอบที่เหมาะสมกับท่านที่สุดที่เกี่ยวกับการเรียนภาษาอังกฤษ

1. ในชั้นเรียนภาษาอังกฤษฉันชอบเรียนโดยการอ่าน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
2. ฉันชอบฟังเทปในห้องเรียน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
3. ฉันชอบเรียนด้วยเกมส์ในห้องเรียน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
4. ฉันชอบเรียนด้วยการสนทนาในห้องเรียน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
5. ฉันชอบเรียนด้วยรูปภาพ ภาพยนตร์ และวีดีโอ ในห้องเรียน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
6. ฉันอยากจดทุกอย่างที่เรียนลงในสมุดบันทึก	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
7. ฉันชอบมีหนังสือเรียนของตัวเอง	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
8. ฉันชอบให้ครูอธิบายทุกอย่างให้นักศึกษาฟัง	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
9. ฉันชอบให้ครูตั้งปัญหาให้นักศึกษาคิดแก้ไข	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
10. ฉันชอบให้ครูเปิดโอกาสให้ฉันพูดเกี่ยวกับสิ่งที่ฉันสนใจ	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
11. ฉันชอบให้ครูบอกถึงความผิดของฉัน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
12. ฉันชอบให้ครูเปิดโอกาสให้ฉันหาข้อผิดพลาดของตัวเอง	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
13. ฉันชอบเรียนภาษาอังกฤษตามลำพัง	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
14. ฉันชอบเรียนภาษาอังกฤษด้วยการทำงานคู่กับเพื่อน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
15. ฉันชอบเรียนภาษาอังกฤษในกลุ่มเล็กๆ	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
16. ฉันชอบเรียนภาษาอังกฤษพร้อมกับเพื่อนทั้งชั้น	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
17. ฉันชอบรู้จักและได้พูดคุยกับชาวต่างประเทศ	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
18. ฉันชอบเรียนไวยากรณ์	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
19. ฉันชอบเรียนคำศัพท์ใหม่ๆ	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
20. ฉันชอบฝึกออกเสียงภาษาอังกฤษ	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
21. ฉันชอบเรียนศัพท์ภาษาอังกฤษโดยการเห็นคำนั้นๆ	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
22. ฉันชอบเรียนศัพท์ภาษาอังกฤษโดยการฟัง	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
23. ฉันชอบเรียนศัพท์ภาษาอังกฤษจากการทำกิจกรรมภาษา	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
24. ฉันชอบเรียนภาษาอังกฤษโดยการอ่านหนังสือพิมพ์ และหนังสืออื่นๆ ที่บ้าน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
25. ฉันชอบเรียนภาษาอังกฤษโดยการดูรายการโทรทัศน์ ที่เป็นภาษาอังกฤษที่บ้าน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
26. ฉันชอบเรียนภาษาอังกฤษจากการฟังเทปที่บ้าน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
27. ฉันชอบเรียนภาษาอังกฤษโดยการอ่านหนังสือภาษาอังกฤษที่บ้าน	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
28. ฉันชอบเรียนภาษาอังกฤษโดยการพูดภาษาอังกฤษกับเพื่อนๆ	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
29. ฉันชอบเรียนภาษาอังกฤษโดยการดูและฟังจากเจ้าของภาษา	มากที่สุด	มาก	เล็กน้อย	ไม่เลย
30. ฉันชอบเรียนภาษาอังกฤษโดยใช้ Internet และติดต่อพูดคุยกับเพื่อนชาวต่างประเทศทาง e-mail	มากที่สุด	มาก	เล็กน้อย	ไม่เลย

ขอขอบคุณในความร่วมมือ

Appendix 2 : A Learning Style Survey Questionnaire

Name _____ Surname _____

Age _____ Gender _____

Name of the School _____

English learning experience _____ Year(s)

Instructions: Read the statements of activities and put a circle on the appropriate word.

- | | | | | |
|---|-----------|------|----------|------|
| 1. In English class, I like to Learn by reading. | very much | much | a little | none |
| 2. In class, I like to listen and use cassettes. | very much | much | a little | none |
| 3. In class, I like to learn by playing games. | very much | much | a little | none |
| 4. In class, I like to learn by having conversations. | very much | much | a little | none |
| 5. In class, I like to learn by pictures, films, and video. | very much | much | a little | none |
| 6. I want to write everything in my notebook. | very much | much | a little | none |
| 7. I like to have my own textbook. | very much | much | a little | none |
| 8. I like the teacher to explain everything to us. | very much | much | a little | none |
| 9. I like the teacher to give us the problems to work on. | very much | much | a little | none |
| 10. I like the teacher to help me talk about my interests. | very much | much | a little | none |
| 11. I like the teacher to tell me all my mistakes. | very much | much | a little | none |
| 12. I like the teacher to let me find my mistakes. | very much | much | a little | none |
| 13. I like to study English by myself (alone) | very much | much | a little | none |
| 14. I like to learn English by talking in pairs. | very much | much | a little | none |
| 15. I like to learn English in a small group. | very much | much | a little | none |
| 16. I like to learn English with the whole class. | very much | much | a little | none |
| 17. I like to go out and have a conversation with foreigners. | very much | much | a little | none |
| 18. I like to study grammar. | very much | much | a little | none |
| 19. I like to learn many new words. | very much | much | a little | none |
| 20. I like to practice sounds and pronunciation. | very much | much | a little | none |
| 21. I like to learn English words by seeing them. | very much | much | a little | none |
| 22. I like to learn English by hearing it. | very much | much | a little | none |
| 23. I like to learn English words by doing something. | very much | much | a little | none |
| 24. At home, I like to learn by reading newspapers, etc. | very much | much | a little | none |
| 25. At home, I like to learn by watching TV in English. | very much | much | a little | none |
| 26. At home, I like to learn by using cassettes. | very much | much | a little | none |
| 27. At home, I like to learn by studying English books. | very much | much | a little | none |
| 28. I like to learn by talking to friends in English. | very much | much | a little | none |
| 29. I like to learn by watching and listening to native speakers. | very much | much | a little | none |
| 30. I like to learn English by using the Internet and contacting
foreign friends via e-mail. | very much | much | a little | none |

Thank you for your co-operation.

Adapted from Willing (1988)