CHAPTER II

REVIEW OF RELATED LITERATURE

It consists of fourth main discussions. It is learning style, strategies, speaking, and previous study.

A. Learning style

1. Definition of Learning Style

There are some definitions about learning style:

a. It is internally based characteristic often not perceived or use consciously, that are the basis for the intake and understanding of new information.[1]

b. It is habit, strategies, or regular mental behaviors concerning learning, particularly deliberate, educational learning that an individual display.[2]

c. It is learning different ways and all ways as well. Each way has its own strengths. In reality we have three learning styles, but just one style dominates.[3]

From those explanations about definition of learning style, the researcher concludes that learning style is the person's habit in learning, include how the best and the easiest way students learn about certain subject.

2. Various perspective of learning style

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[1] John Reid. *Learning Style in the ESL/ EFL Classroom.* Volume 2.1999 (http://www.awej.org/awejfiles/_44_12_6.pdf ,accessed on November, 29, 2011), 72

[2] Alan Pritchard, *Ways Of...,* 41

[3] Bobbi DePorter et.al., *Quantum Teaching : Mempraktikkan Quantum...*, 216

Each person has preferred way of learning that is determined by their cultural and educational background and personalities.

a. Information personalities

It distinguishes between the way learners sense, think, solve problems, and remember information. It Kolb's Learning Styles inventory in Tatyana Putintseva's article, entitled *The Importance of Learning Style in EFL/ ESL* includes:

i. **Diverging (feeling and watching)**

People with diverging styles are able to look at things from different perspectives. They are sensitive. They prefer to watch rather than do, tend to gather information and use imagination to solve problems. They are best at viewing concrete situations from several different viewpoints. Kolb called this style 'Diverging' because these people perform better in situations that require ideas-generation, for example, brainstorming. They have broad cultural interests and like to gather information. They are interested in people, tend to be imaginative and emotional, and tend to be strong in the arts. They prefer to work in groups, to listen with an open mind and to receive personal feedback.

ii. **Assimilating (watching and thinking)**

The Assimilating learning preference is for a concise, logical approach. Ideas and concepts are more important than people. These people require good clear explanation rather than practical opportunity. They excel at understanding wide-

ranging information and organizing it in a clear   logical format. They are less focused on people and more interested in   ideas. People with this style are more attracted to theories than practice. In formal learning situations, people with this style prefer   readings, lectures, exploring analytical models, and having time to think.

iii. **Converging (doing and thinking)**

 People with a Converging learning style use their learning to find solutions to practical issues. They prefer technical tasks, and are less concerned with people. They can solve problems and make decisions. A Converging learning style enables specialist and technology abilities. People with a Converging style like to experiment with new ideas, to simulate, and to work with   practical applications.

iv. **Accommodating (doing and feeling)**

The Accommodating learning style is 'hands-on', and relies on intuition rather than logic. These people use other people's analyses, and prefer to take a practical, experiential approach. They are attracted to new challenges and experiences, and to carrying out plans. They commonly act on '   good   instinct rather than logical analysis. Also, they tend to rely on others for information. This learning style is prevalent and useful in roles requiring action and initiative. People with this learning style prefer to work in teams to complete tasks. They

set targets and actively work in the field trying different ways to achieve an objective.[4]

b. Personality Patterns

These focus on attention, emotion, and values. Understanding these differences allows predicting the way learners react and feel about different situations. The Myers-Briggs Type Indicator and the Keirsey Temperament Sorter are two of the most well-known personality pattern evaluations. They are classified according to their preference for:

i. **Introversion** (I) (interest flowing mainly to the inner world of concepts and ideas)

ii. **Extroversion** (E) (interest flowing mainly to the outer world of actions, objects, and persons);

iii. **Sensing** (S) (tending to perceive immediate, real, practical facts of experience and life);

iv. **Intuition (N)** (tending to perceive possibilities, relationships, and meanings of experiences);

v. **Thinking (T)** (tending to make judgments or decisions objectively and impersonally);

vi. **Feeling (F)** (tending to make judgments subjectively and personally);

vii. **Judging (J)** (tending to act in a planned and decisive way);

viii. **Perceiving (P)** (tending to act in a spontaneous and flexible way). [5]

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[4] Tatyana Putintseva. "The Importance of Learning Style in EFL/ ESL". (http://iteslj.org/Articles/Putintseva-LearningStyles.html, accessed on June 16, 2012), 2

c. Perceptual Learning Style

H. Gardner's concept of multiple intelligences', as mentioned   earlier, is commonly viewed as, in fact, a model of learning styles. According to this point of view, the following types of learning styles can be identified:[6]

i.   Visual

Visual learners prefer to learn by seeing. They have good   visual recall and prefer information learners to be presented visually in the form of diagrams, graphs, maps, poster and display, for example they often use hand movement when describing or recalling events or objects and have a tendency to look upwards when thinking or recalling information, make a lot of symbols and images in their records.[7] Visual learners learn best when they begin with the whole picture, reading material at a glance, for example, gives an overview of the literature. These modalities to access visual images created and remember color, space relations, portraits, mental, and images that stand out.

Visual learner as follows:

- Neat and orderly

- Fast talker

- Love to plan and manage everything

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5 Tatyana Putintseva. "The Importance of Learning Style…., 3
6 Tatyana Putintseva. "The Importance of Learning Style…., 4
7 Alan Pritcard. *Ways Of...*, 43

- Remember the drawings, preferred to read

- Requires a comprehensive and objective picture and capture

  the detail given what is seen

- Care in detail

- Like to demonstrate rather than speech

- Like art rather than music

- Keep in performance[8]

ii.   **Auditory**

Auditory learners prefer to learn by listening. They have good auditory memory and benefit from discussion, lectures, interviewing,   hearing stories and audio tapes, for example. They like sequence, repetition and summary, and when recalling memories tend to tilt their head and use level eye movements.[9] Auditory learners prefer to record on tape rather than recorded, because they like to listen to repetitive information, this modality to access all kinds of sounds and words, created and remember music, tone, rhythm, rhyme, internal dialogue and sound.

Auditory learner as below:

- Easy disturb by noise

- Speak with rhythmic pattern

- Learn by listening or moving their lips, voice while reading

- Talk to their self when working

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[8] Bobbi DePorter, et.al., *Quantum Teaching : Mempraktikkan Quantum Learning..*, 123
[9] Alan Pritcard, *Ways Of…*, 43

- Like music rather than art

- Easy memorized something has been discusses rather than has been seen

- Like to talk, discuss or explain something[10]

iii. Kinesthetic

Kinesthetic learner prefers to learn by doing. They are good at recalling events and associate feelings or physical experience with memory. They enjoy physical activity, field trips, manipulating objects, and other practical, first hand experience. They often find it difficult to keep still and need regular breaks in classroom activities.

Kinesthetic learner' prefers to learn through movement and is best to memorize the information by linking the movement. This modality of accessing all types of motion and emotion are created and kept in mind. Kinesthetic learners as follow:

- Learn best by moving

- Remembering when walking and seeing

- Speak slowly

- Response toward physical response

- Can not sit for a long time

- Use finger when reading

- Memorize when moving and seeing[11]

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[10] Bobbi DePorter, et.al., *Quantum Teaching : Mempraktikkan Quantum Learning...*, 123

d. Social Interaction

This looks at likely attitudes, habits, and strategies learners will take toward their work and how they engage with their peers when they learn. The Reichmann-Grasha model, for instance, focuses on student attitudes toward learning, classroom activities, teachers, and peers. This model identified as follow:

i. **Avoidant students** tend to be at the lower end of the grade distribution. They organize their work poorly, and take little responsibility for their learning.

ii. **Participative students** are characterized as willing to accept responsibility for self-learning and relate well to their peers.

iii. **Competitive students** are described as suspicious of their peers leading to competition for rewards and recognition.

iv. **Collaborative students** enjoy working in harmony with their peers.

v. **Dependent students** typically become frustrated when facing new challenges not directly addressed in the classroom.

vi. **Independent students,** as the name implies, prefer to work alone and require little direction from the teacher. [12]

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[11] Bobbi DePorter, et.al., *Quantum Teaching : Mempraktikkan Quantum Learning..*, 124
[12] Tatyana Putintseva. "*The Importance of Learning Style….*,5

e. Field Independent or Field Dependent Learning style

FI hinges on the perceptual skill of "seeing the forest for the trees." A person who can easily recognize the hidden castle or human face in 3-D posters and a child who can spot the monkeys camouflaged within the trees and leaves of an exotic forest in coloring books tend toward a field independent style. The "field" may be perceptual or it may be abstract, such as a set of ideas, thoughts, or feelings from which the task is to perceive specific subsets. Field dependence is, conversely, the tendency to be "dependent" on the total field so that the parts embedded within the field are not easily perceived, though that total field is perceived most clearly as a unified whole:

i. Field Independent: learn more effectively step by step or sequentially. This kind of learner begins to learn by analyzing facts and proceeding the ideas. As an analogy, the learner sees the tree instead of the forest

ii. Field Dependent: learn more effectively in contents, holistically, intuitively, and is especially sensitive to human relationship and interactions. The learners see the forest instead of the trees.[13]

f. Reflective or Impulsive learning style

It is common for us to show in our personalities certain tendencies toward reflective and impulsive at other times. David Ewing refers to styles that

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[13] H. Douglas Brown, *Principle of Language…, 114*

are closely related to the reflective and impulsive dimension. It categorize as follow:[14]

   i. Reflective learner: learn more effectively by first considering options before responding.

   ii. Impulsive learner: learn more effectively by responding immediately. This learner is brave to take the risk.[15]

g. Tolerance ambiguity

The degree to which you are cognitively willing to tolerate ideas and propositions that run counter to your belief and structure of knowledge. Some people are, for example relatively open minded in accepting ideologies and facts that contradict their own views, however there are some people tend to reject the ideologies or ideas that are contradictory with their existing system. The description as follow:

   i. Ambiguity tolerance: learn more effectively when opportunities for experiment and risk as well as interaction are present

   ii. Ambiguity intolerant: learn more effectively when in less flexible, less risky more structured situations[16]

h. Right / left hemispheres

Left and right brain dominance is a potentially significant issue in developing a theory of second language acquisition. The left hemisphere is

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[14] H. Douglas Brown, *Principle of Language…,121*
[15] H. Douglas Brown, *Principle of Language…,121*
[16] H. Douglas Brown, *Principle of Language…,, 119*

associated with logical analytic thought with mathematical and linear processing; meanwhile right hemispheres perceives and remember visual, tactile and auditory images. It indicates as follow:[17]

i. Right hemispheres : learn more effectively toward auditory, impulsive, interactive learning

ii. Left hemispheres : learn more effectively toward visual, analytic, reflective.[18]

There are a lot of type and characteristic of learning style, and each person is difference from another. There are a lot of ways how person's get easy and more enjoyable to deal with information in learning English language subject.

3. Theory of VAK Learning Styles

Learning style is exists in many years ago, and a lot of theory that underlie my thesis. In here, the researcher focuses on VAK learning style theories was developed by Neil Fleming. Prior to Fleming's work, VAK was in common usage.[19] Based upon the VAK (visual, auditory and kinesthetic) model of learning, VAK learning styles theory was pioneered in 1987 by Neil Fleming. According to VAK theory, every person exhibits unique learning style

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[17] H. Douglas Brown, *Principle of Language…,118*

[18] H.Douglas Brown. *Principle of Language Learning and Teaching…*, 118

[22]Slameto, *Belajar dan Faktor- Faktor Yang Mempengaruhinya…..*, 54

[19] Neil Fleming. VARK A Guide to Learning Styles. (http://www.vark-learn.com/english/page.asp?p=copyright, accessed on July 26, 2012)

preferences. VAK learning styles theory is designed to describe how three distinct types of learners process information.[20]

B. Strategies for VAK Learning Style

1. Definition of Strategies

Strategies are specific methods of approaching a problem or task[21], it also an action or series of action for achieving an aim.[22] In this study, strategies are the step or action how students get easy and enjoy to dealing with certain information. The strategies based on students learning styles

2. VAK Strategies

There are some strategies that are usually used by students in learning certain subject based on their learning style. The identification as follow:

    i.   Visual Learner

    a) Visual learners often have poor auditory skills and weak verbal abilities.

    b) Visual learners often have difficulty blending sounds and discriminating short vowel sounds.

    c) Visual learners are often poor spellers

    d) Visual learners easily remember information presented in pictures, charts, or diagrams.

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[20]James Withers. VAK of Learning Style Theory. http://www.ehow.com/about_6612058_vark-learning-styles-theory.html, accessed on July 13, 2012)

[21] H. Douglas Brown, *Principle of Language…,113*

[22] Summer Della, *Dictionary of American English*, Pearson Education

e) Visual learners can make "movies in their minds" of information they are reading. Their movies are often vivid and detailed.

f) Visual learners often pay close attention to the body language of others (facial expressions, eyes, stance, etc.) Be aware of your body language and use it to emphasize important points you wish to make during class.

g) Use videos and overheads as part of your lectures.

h) Visual learners may tune out spoken directions.[23]

i) They often do not remember information given orally without being able to see it. They memorize using visual clues[24]

ii. Auditory Learners

Auditory learners learn best by hearing information. They can usually remember information more accurately when it has been explained to them orally.

a) Auditory learners can remember quite accurately details of information they hear during conversations or lectures. (Don't be annoyed if the student isn't taking notes from your lectures)

b) Auditory learners have strong language skills, which include a well-developed vocabulary and appreciation for words.

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[23] Elizabeth Clinton. *"Use Learning Styles to Enhance Your Teaching,"* (http://sites.google.com/site/winchestercpd/vak-learning-styles, accessed on June 25, 2012)

[24] Patricia Vakos, "Contrasting Styles" (http://www.phschool.com/eteach/social_studies/2003_05/essay.html, accessed on July 20, 2012)

c) Strong language skills often lead to strong oral communication skills. They are usually talented at giving speeches, oral reports and articulating the ideas.

d) Auditory learners may find learning a foreign language to be relatively easy. They also may have musical talents.

e) Auditory learners tend to have poor visual skills, so graphs, maps and charts may present a challenge to the auditory learner. They do best with oral directions and assignments.

f) Auditory learners often reverse words, for example: from, for, form and was, saw.

g) Auditory learners tend to have poor handwriting and small motor skills.

h) Story-telling

i) Solving difficult problems

j) Working in groups

k) Participating in class discussions

`   l) Remember most easily if saying something repeatedly.[25]

iii. Kinesthetic Learners

Kinesthetic learners learn best by moving their bodies, activating their large or small muscles as they learn. They are "hands-on learners" or

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[25] Dawna, Markova. *The Open Mind: Exploring the 6 Patterns of Natural Intelligence.* Berkeley, California: Conari Press (http://easychangeworks.com/articles-nlp/markova.htm, accessed on July 20, 2012)

"doers" who actually concentrate better and learn more easily when movement is

involved

a) Kinesthetic learners often wiggle, tap their feel or move their

legs when they sit. Many were called "hyperactive" as

children.

b) Kinesthetic learners work well with their hands. They may be   good at art,

sculpting, and working with various tools, learning in lab situations or learning by

computer.

c) Kinesthetic learners need to take notes and highlight important information.

They are using their small muscles to remember information.[26]

C. Speaking

As quoted by MGMP English Language in "*The Practice of Language English Teaching*" by Jeremy Harmer that Speaking is one of skill in English language subject. If students want to speak fluently they have to be able pronounce correctly.[27] In addition, they need to intonation, conversation either transactional or interpersonal conversation.[28]

1. Definition of Speaking

Speaking is such fundamental human behavior which consists of producing systematic verbal utterances to convey meaning. It is an essential means of communication learned in early childhood and developed during adolescence by many kinds of social factors.[29] It is an interactive process of constructing meaning that involves

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[26]   Elizabeth   Clinton.   *"Use   Learning   Styles   to   Enhance   Your Teaching,"*(http://sites.google.com/site/winchestercpd/vak-learning-styles, accessed on June 25, 2012)

[27] Kimtafsirah,et.al., Teaching Speaking.(Jakarta: MGMP Bahasa Inggris, 2009), 2

[28] Kimtafsirah,et.al., Teaching Speaking…, 2

producing, receiving and processing. Speaking as interaction and social based activity. All these perspective see speaking as an integral part of people's daily activity. [30]

Having speaking ability is an important thing in the process of language a large percentage of the world's language learners study English in order to develop proficiency in speaking. By speaking, people can socialize each other. They can ask and help something to other people, they can response someone's statements, they can express their feeling or opinion and exchange information, and soon. Therefore, mastering speaking abilities is very important

From those explanations above, speaking is such fundamental human behavior which consists of producing systematic verbal utterances to convey meaning. By speaking, people can socialize each other. They can ask and help something to other people, they can response someone's statements, they can express their feeling or opinion and exchange information, and soon.

2. The teaching of speaking

It is not easy to teach speaking in the classroom. We must know the background our students, how the capabilities are in English speaking, and what technique that appropriate in teaching speaking.

The primary aim of teaching speaking is not only to have students knows the rules of language but also to make them able to use language appropriately in the social context. In the teaching speaking, the teacher has to develop the students' speaking ability by giving many chances to the students to practice. There are some educational reasons to practice speaking during a lesson. First, speaking activities can reinforce the

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[30] Sari Luoma. *Assessing Speaking.* (New York: Cambridge University Press, 2003), 9

learning of new vocabulary, grammar or functional language. Second speaking activities give students the chance to use the new language that they are learning. Third, speaking activities give more advanced students the chance to experiment with they language that they have already known in different situations and different topics.[31] Beside it there are seven factors that have to be followed by teachers in order to create a good speaking classroom. They are listening to what the students say, taking seriously what they say, encouraging them to talk with each other, accepting their questions and comments, allowing them to speak and think for themselves, encouraging them to find out what they know and what to know, praising and respecting the language of each student[32]

3. Characteristic of successful speaking activities

Most of students try to speak in English fluently, but the don not know what should they do. In here there are a lot of characteristic successful speaking activities.

i. Learner talk a lot

As much as possible of the period of time allotted to the activity is in fact occupied by learner talk. This may seem obvious, but often most time is taken up with teacher talk or pauses.

ii. Participation is even

Classroom discussion is not dominated by a minority of talkative participant: all get a chance to speak, and contributions are fairly evenly distributed.

iii. Motivation is high

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[31] Joana Baker. *Essential Speaking Skill* (Continum Britian :2005), 5
[32] Penny Ur. *A Course in Language Teaching* (Cambridge University Press: 1996), 121

Learners are eager to speak: because they are interested in the topic and have something new to say about it, or because they want to contribute to achieving a task objective.

iv. Language is of an acceptable level

Learners express themselves in utterances that are relevant, easily comprehensible to each other, and of an acceptable level of language accuracy.

From the explanation above the character of successful speaking is learner talk a lot, participation is even, motivation is high and language is of an acceptable level. Besides, we must try to have a confident and don't afraid to make mistake when you speak, because mistake is natural.[33]

4. Types of speaking activities

As quoted by Imro'atus Sa'adah from Tricia Hedge, that there are some activities that used in speaking:

i. Free discussion

It can provide important opportunities for developing certain aspects of fluency. Ideally over a period of time, free discussion activities will involve students in talking about a range of topics engaged their interest, opinion, histories, and experience. Free discussion can also encourage students to use the language needed to sustain conversation over a period of time by drawing in others speakers. It also provides for students to practice the strategies required in interpersonal communication, for example taking and holding turns, introducing a topic of shifting a new topic and encouraging responses and other contributions.

ii. Role Play

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[33] Penny Ur. *A Course in Language Teaching,…120*

It refers to a number of different activities, ranging from simple dialogues prompted by specific information on role cards to more complex simulations which pass through a number of stages. Students are no longer limited to the kind of language used by learners in a classroom. The language can correspondingly in several parameter based on the profession, status, personality, attitudes or mood of the character in role play.

iii.   Gap activities

This involves each learner in a pair group processing information which the other learners do not have. Students' information must be shared in order to achieve outcome. [34]

Besides, according to Hayriye Kayi in Teaching Speaking: Activities to Promote Speaking in a Second Language, the activities as follow:

iv.   Storytelling

Students can briefly summarize a tale or story they heard from somebody beforehand, or they may create their own stories to tell their classmates. Story telling fosters creative thinking. It also helps students express ideas in the format of beginning, development, and ending, including the characters and setting a story has to have. Students also can tell riddles or jokes. For instance, at the very beginning of each class session, the teacher may call a few students to tell short riddles or jokes as an opening. In this research, not only will the teacher address students' speaking ability, but also get the attention of the class.

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[34] Imroatus Sa'adah. *Using role play in teaching english:focus on the students speaking practice. Tarbiyah Faculty.*IAIN Sunan Ampel Surabaya, 2009,23. Unpublished.

v.   Describing Picture

Another way to make use of pictures in a speaking activity is to give students just one picture and having them describe what it is in the picture.   For this activity students can form groups and each group is given a different picture. Students discuss the picture with their groups, then a spokesperson for each group describes the picture to the whole class. This activity fosters the creativity and imagination of the learners as well as their public speaking skills.[35]

D. The Relationship between VAK learning styles and strategies

Learning styles and strategies appear to be among the most important variables influencing performance in a second language.   Recent   research suggests that learning style has a significant influence on students' choice of learning strategies, and that both styles and strategies affect learning outcomes.[36] Both of them have strong influence in learning[37] Based on the explanation above, learning style and strategies have correlation and influence by each other. Students, who understand their learning style, will find certain strategies in learning certain subject and use it in effective way. It helps them to improve their achievement. The strategies that student uses to learn a second language depend greatly on their individual learning style. Some students are outgoing and will experiment freely and frequently while learning a new language. Besides, teacher

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[35] Hayriye Kayi. *Teaching Speaking: Activities to Promote Speaking* in a Second Language.(http://iteslj.org/Techniques/Kayi-TeachingSpeaking.html, accessed on June 20, 2012)

[36] Ehrman and Rebecca L. Oxford. *The Role of Styles and Strategies in Second Language Learning"* (http://www.education.com/reference/article/Ref_Role_Styles/, accessed on June 23, 2012)

[37] Rebecca, L.Oxford. *"Language Learning Style and Strategies". (web.ntpu.edu.tw/~language/.../read2.pdf* , accessed on June 15, 2012)

can help their students by designing instruction that meets the needs of individuals with different stylistic preferences and by teaching students how to improve their learning strategies

E. Previous study

In this part, the researcher wants to show about previous research to find the difference with this study.

The use of Learning Style and Admission Criteria in Predicting Academic Performance and Retention of College Freshmen

This research was conducted with college freshmen to assess the effectiveness of university admission variables and students' learning styles in predicting students' academic performance and retention. ACT composite score, high school class rank, high school core GPA, and learning style were analyzed. Learners preferring a field independent (56%) and a field neutral learning style (24%) exhibited greater academic performance than their dependent field (20%) peers during the first year of college as evidence by GPA. Learning style and ACT score appeared to be the most predicators of student retention.[38]

An Analysis of Chinese EFL Belief about the Role of Rote Learning in Vocabulary Learning Strategies

This study sets out to investigate Chinese EFL belief about the role of rote learning in vocabulary learning strategies. This study has three research questions:

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[38] Bryan L. Garton, et al. *"The use of Learning Style and Admission Criteria in Predicting Academic Performance and Retention of College Freshmen".Journal of Agricultural Vol.41 No.2, 2000.46-53(http://www.jae-online.org/attachments/article/444/41-02-46.pdf, accessed on July 13, 2012)*

(2) Do Chinese EFL learners prefer to use RL and believe that they use more RL strategies than other memory strategies? (2)Do Chinese EFL beliefs that RL strategies work better or worse than other strategies? (3) Is there any relationship between beliefs about RL and learners' achievement in the English vocabulary test? The finding of this study is Chinese EFL learner prefer RL strategies to other memory strategies and beliefs that they use more RL strategies than other memory strategy. In addition, learner beliefs about RL were found to be generally positive and strongly related to the influence of traditional Chinese culture and China's specific national situation.[39]

An Analysis of Students' Learning Styles and Cognitive Mastery in Building Construction Education

This study is analysis of students' learning styles and cognitive mastery in building construction education. Learning style may sometimes have effected from their reflection about their learning and at other times it will have come together in their good learning experiences with their awful ones. The levels of students' think in learning also influenced by their learning styles. For school level the cognitive ability is related to their achievement in their academic performance. The cognitive element in school level is designed based on Bloom's Taxonomy to measure the students' achievement. This research conducted is to identify the differences between students' learning styles and their cognitive mastery used Bloom's Taxonomy and revised

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[39] Xiuping Li. "*An Analysis of Chinese EFL Belief about the Role of Rote Learning in Vocabulary Learning Strategies.Asian EFL Journal Vol7 Article 6.2004(*www.asian-efl-journal.com/xiuping_11-05_thesis.pdf*, accessed on July 13, 2012)*

Taxonomy by Anderson and Krathwohl in Building Construction Course (BCC) of Vocational Schools (VS). The Felder and Silverman Learning Styles Model (FSLSM) and Index of Learning Styles (ILS) were used as the instrument in this study. One set of achievement test was developed based on both taxonomy concepts in Building Construction Subject (BCS). The aim of the research is to identify the differences between dimensions of learning styles in FSLSM with students' cognitive mastery in BCS. Research involved 128 students from three VS in Malaysia. There are four dimensions of learning styles investigated concerning two type of learners in each dimension. A first dimension is processing represent the active and reflective learners, second is perception dimension correspond to sensing and intuitive learners, third dimension is input it is be visual and verbal learners and forth dimension is understanding represent for sequential and global learners. Cognitive elements used in this research are the ability of students to answer the questions in vocational elements in BCS which are knowledge, skills and problem solving. The achievement test developed used the subject specification and the level of difficulty in every element of BCS. The analysis used Multivariate Analysis of Variance (MANOVA) to answer the research hypotheses. The results showed that processing, input and understanding dimensions are influenced the students' mastery in cognitive learning in BCS while the perception dimension is not influenced the students' mastery in cognitive learning in BCS. The details findings discussed the significant factors in each dimension and cognitive elements. In summary, the way students get the information in their learning is depended on how they prefer to learn. To know how they prefer to learn teachers should understand what type of learners that they had.[40]

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[40] MM. Mohamad, et al. *An Analysis of Students' Learning Styles and Cognitive Mastery in*

Those examples of previous study above different with this study. There are researcher correlate students' learning style and teacher creativity as independent variables. Besides, here are a lot of methods that other researcher use correlation, Influence, and also the role by relate many kinds variable, such as learning patterns, motivation, and students' achievement However, in this study the researcher only focus on students' VAK (Visual. Auditory, and Kinesthetic) learning styles and strategies based on their learning style in English speaking. This questionnaire on this research uses learning style questionnaire, written by Andrew D. Cohen, Rebecca L. Oxford, and Julie C. Chi.

Building Construction Education(http://library.iated.org/view/MOHAMAD2012ANA, accessed on July 26, 2012)