CHAPTER II

REVIEW OF RELATED LITERATURE

The review of related literature involves the systematic identification, location, and analysis of documents containing information related to the research problem. The major purpose of reviewing literature is to determine what has already been done that relates to the problem.

In this chapter, the researcher discusses some theories that are supporting in this research. The theories of this research are learning, learning styles, the characteristic of learning style, the using of phrase, the thinking styles ad the learning styles, and the finding of the previous study.

2.1 Learning

The process of learning is an individual experience for each person.

Learning takes place whenever an individual's behavior is modified when a person thinks or acts differently. To make clear, this research has some definitions about learning.

Learning is one of the most important areas in present day psychology and yet it is an extremely difficult concept to define. The American heritage dictionary defines learning as follows: to gain knowledge, comprehension, or mastery through experience or study. The most popular of these definitions is the one suggested by Kimble, which defines learning as a relatively permanent change in behavioral potentially that occur as a result of reinforced practice.¹⁴

Beside that, Brown stated that learning is acquiring or getting of knowledge of a subject or skill by study experience or construction and Learning is a process of operant conditioning through a careful reinforcement.

A more specialized definition might read as follows. Learning is relatively permanent change in a behavioral tendency and is the result of reinforced practice. 15

According to Jeroid, there are areas of agreement and similar emphasis among the learning theories from which generalizations can be made. The following psychological conditions and principles are important factors to consider in the design and use of instructional media. They are:¹⁶

a. Motivation

There must be a need, an interest, or a desire to learn on the part of the student before attention can be given to the task to be accomplished. Moreover, the experiences that the learner will engage must be relevant and meaningful to him or her. Therefore, it may be necessary to create the interest by means of motivational treatment of the information presented in instructional media.

¹⁴ B.R. Hergenhann. An Introduction Tc Theories of Learning Second Edition (USA: Practice Hall inc, 1982), 3.

H. Douglas Brown. Principles of Language Learning and Teaching (New Jersey: Prentice-Hall Inc, 1994), 6.

¹⁶ Jerold E. Kemp. Planning and Producing Instructional Media Fifth Edition (Cambridge: Harper & Row, 1985), 14.

b. Individual differences

Students learn at various rates and in different ways. Such factors as intellectual ability, educational level, personality, and cognitive learning styles affect an individual's readiness and ability to engage in learning. The rate at which information is presented in instructional media should be considered in terms of the anticipated comprehension rates of students.

c. Learning objectives

When students are informed of what they can expect to learn through the use of instructional media, their chances for success are greater than when not so informed. A statement of objectives to be accomplished with the materials is helpful to those who will plan the materials. The objectives indicate what content will receive attention in the media.

d. Organization of content

Learning is easier when content and procedures or physical skills to be learned are organized into meaningful sequences. Students will understand and remember material longer when it is logically structured and carefully sequenced.

Also, the related of information to be presented is established in term of the complexity and difficulty of content. By employing these suggestions in the design of media, the student can be helped to better synthesize and integrate the knowledge to be learned.

e. Pre-Learning preparation

Students should have satisfactorily achieved the preparatory learning or have had the necessary experiences that may be prerequisite to their successful use of the instructional media to be studied. This means that, when planning materials, careful attention should be given to the nature and probable level of preparation of the group for which the materials are to be designed.

f. Emotions

Learning which involves the emotions and personal feetings, as well as the intellect, is influential and lasting. Instructional media are powerful means of generating emotional response such as fear, anxiety empathy, love, and excitement. Therefore, careful attention should be given to media design elements are emotional research is desired for learning or motivational purposes.

g. Participation

In order for learning to take place, a person must internalize the information, not simply be told it. Therefore, learning requires activity. Active participation by the student is preferable to lengthy period of passive listening and viewing.

Participation means engaging in mental or physical activity interspersed during an instructional presentation. Through participation, there will be a greater probability that students will understand and retain the information presented.

h. Feedback

Learning is increased when students are periodically informed of progress in their learning. Knowledge of successful results, a good performance or the need for certain improvement will contribute to continued motivation for learning.

i. Reinforcement

When the student is successful in learning, he or she is encouraged to continue learning. Learning motivated by success is rewarding; it builds confidence, and it will affect subsequent behavior in positive ways.

i. Practice and Repletion

Rarely is anything new learned effectively with only exposure. For knowledge, or a skill, to become a confirmed part of an individual's intellectual repertoire or competencies, provision should be made for frequent practice and repetition, often in different contexts. This can lead to long-term retention.

k. Application

A desired outcome of learning is to increase the individual's ability to apply or transfer the learning to new problems or situations. Unless a student can do this, complete understanding has not taken place. First, the learner must have been helped to recognize or discover generalizations (concepts principles, rules) relating to the topic or task.

Then opportunities must be provided for the learner to reason and make decisions by applying the generalizations or procedures to a variety of new, realistic problems or tasks.

2.2 Learning Style

Recent educational research provides theoretical support that students are characterized by significantly different learning styles: they preferentially focus on different types of information, tend to operate on perceived information in different ways, and achieve understanding.

Learning styles refers to an individual's natural habitual and preferred ways of absorbing, processing and retaining new information and skills. These styles seem to persist regardless of the content are trying to master (e.g., learning to fly an airplane vs. learning another language) or the method of instruction are given.¹⁷

Another definition of learning styles is general, broad approaches used to learn a subject. According to Cornett, learning style is a consistent pattern of behavior but with a certain range of individual variability. Styles then are overall pattern that give general direction to learning behavior. ¹⁸

The physical elements of learning styles all need to be considered when one teaches students. Learner might prefer auditory, visual or kinesthetic learning styles. In this research present three kinds of that, namely:

David Nunan, Kathleen Bailey. Practical English Language Teaching (USA: Mc Graw Hill, 2005), 268.

¹⁸ Joy M. Reid. Learning Styles In The ESL/EFL Classroom (Boston: Heirle & Heinle, 1995), 34.

2.3.1. Visual

Visual learning style has preference for seen or observed things, including pictures, diagrams, demonstrations, displays, handout, films, flip-chart, etc. This group will be best able to perform a new task after reading the instructions or watching someone else do it first. These are the learners that will work from list and written directions and instruction.¹⁹

Students who have a visual learning style learn best if a major component of the material or lesson is something they can see or watch. It means that Visual learners need to see body language and facial expressions to fully understand information.

They tend to think in terms of pictures in their heads, and find visual aids extremely helpful. In a classroom or training situation, these learners will tend to sit toward the front of a room, where there are no visual obstructions or distractions. They also tend to take copious notes to help them absorb information.²⁰

This learner works best with written inaterial and instructions, diagrams, posters, and demonstrations. The information, which the visual learner takes in, is translated into and stored as pictures or images in their brains.

Visual learners are usually neat and weil organized. They

¹⁹ Robbi Deporter, Mark Reardon, & Sarah Nourie. Quantum Teaching (Bandung: Mizan, 1999), 85.

Mary Jo Manzanares. "The Visual Learner", (http://www.leadershipturn.com/thc-visual-learner/2006, Accessed on May 22, 2009).

may use statements with visual cues such as "I get the picture".

Unnecessary movement can be a distraction to a visual learner.

Visual learning style will work well for anyone wanting to do course work via distance education. Although technology is now allowing for more auditory components, the written component in distance learning is still prevalent whether it is through textbooks, web sites, conference boards or e-mail. Distance education allows the learners to control their learning environment making it more conducive to their learning.²¹

Visual learners get more information from visual images (pictures, diagrams, graphs, schematics, demonstrations) than from verbal material (written and spoken words and mathematical formulas). Most students in science classes are visual learners while the information presented in almost every lecture course is everwhelmingly verbal-written words. Furthermore formulas in texts and on the chalkboard, spoken words in lectures, with only an occasional diagram, chart, or demonstration breaking the pattern.

Lecturers should not be surprised when many of their students cannot reproduce information that was presented to them not long before; it may have been expressed but it was never heard.²²

Visuals learners should sit at the front row in order they are

(http://members.shaw.ca/mdde615/l.rnstycats.htm#visual. Accessed on May 22, 2009).

²¹ Jennifer Stein. "Learning Styles Categories Graphic"

Felder, Richard, "Reaching the Second Tier: Learning and Teaching Styles in College Science Education." Department of Chemical Engineering J. College Science Teaching, 1993 (http://members.shaw.ca/mdde615/lrnstycats.htm.visual. Accessed on May 22, 2009).

not disturbed when they see a written at the blackboard. The lecturer should keep them from something, which disturbs their visual when they are studying. It means that visual learners learn through seeing and often prefer to take detailed notes to absorb the information.

Careers that suit the visual learner would include executive positions where a vision of the future is important, architects, engineers, and surgeons.

2.3.2. Auditory

Auditory learners use all kinds of sound and word, which are created or remembered music; rhyme, tone internal dialogue and voice are connected in this learner style. This group will be best able to perform a new task after listening to instructions from an expert.²³

The auditory learners usually talk active, and the lecturer usually forbids them when he talks with him self and wit other friends beside them. The lecturers should know their habits and knows that talking is the best way in his learning, so the lecturer has to use more sound to teach them. It means that auditory learners learn through seeing and often benefit from reading text aloud and using a tape recorder.

The auditory learners should be sat at the back row in order they do not disturb other students if they speak when they are studying. The lecturer should keep their listening from the sound,

²³ Robbi Deporter, Mark Reardon, & Sarah Nourie. Quantum Teaching (Bandung: Mizan, 1999), 85.

which disturbs their listening from lecturer explanation during studying.²⁴ Students who have an auditory learning style learn best if there is an oral component to the material being learned. Verbal instructions, taped lectures and face-to-face instruction work best.

Auditory learners filter the information they hear and store the relevant data but don't necessarily form pictures around it. When they are problem solving, auditory learners prefer to "talk it out". While talking they may use phrases that relate to how they learn such as "I hear you".

Unnecessary noise can be a distraction for the auditory learner. Although this type of learner could have more difficulty with distance education than an auditory learner; it is still possible to be successful. Some distance education courses have audio and or video taped components. These learners could read materials aloud or have it read to them.

Also they can control their learning environment thereby avoiding unnecessary distracting noises. Some people are auditory learners: people who learn by hearing. They might read something or do it, but it's not real for them until they hear it. They might read a textbook chapter four times and not get it, yet understand after one explanation from the teacher.

The auditory learners should be sat at the back row in order

²⁴ Barbara Prashing. The Power of Learning Styles (Bandung: Mizan. 2007), 19.

they do not disturb other students if they speak when they are studying. The lecturer should keep their listening from the sound, which disturbs their listening from lecturer explanation during studying.²⁵

Like other learning types, auditory learners can be in conjunction with other types, and it has subtypes that aren't acknowledged by most treatments of the topic. Auditory learning is, however, one of the primary learning types, roughly equal with visual learners for its pervasiveness.

a. Discuss

Some audio learners might find discussion better than strict listening or speaking, with it as a combination of the two. Pick discussion-based classes when or if you have a choice. See if you can find classmates willing to discuss what you learned in class, or friends who will chat about concepts you need to know to help you learn them well.

b. Listen

Heed what others say. Take very close notice to whatever the teacher says in class, and when possible, study from others' speech. See if you can find classmates who learn better by speaking; maybe one will be willing to speak loudly enough for you to hear.

²⁵ Barbara Prashing. The Power of Learning Styles (Bandung: Mizan. 2007), 19.

c. Read

Read your lesson out loud. Pay attention to what you're saying; hearing you say it can stimulate learning. Especially do this if you only have something written to work with, like a book. Reading aloud while researching for a paper might also help you best process it. It needn't be loud; the only one who needs to hear you is you, unless you're helping a listener study.

d. Record

If your teacher allows it, bring a tape recorder to class. Record your teacher if possible, and if not, you can always record yourself reading your material. You can listen to this in the car or when convenient, though you'll probably have the best results if you listen to it for the second time within 24 hours. Listen to the recording as many times as necessary. If your teacher rambles, make your own concise recorded versions of the notes so you're studying just what you need.

e. Easy

When listening to or reading something, deliberately easy it in your head. Don't just be a sieve—catch what's said and deliberately think that thing. For example, if your Spanish teacher says at one point that alcazar de plus and infinitive verb means "to have just finished" doing that action, think that to yourself as if you're in the middle of trying to translate it.

f. Watch

This isn't strictly a visual method. Find a film documentary or TV program talking about what you're trying to learn. This can help auditory learners with a secondary learning type of colored visual or, if you end up making your own videos for watching to study, kinesthetic. Can't find a show on your topic? Check online; the myriad of free videos on the Internet might have what you're seeking.

g. Yo-yo

This will primarily help those auditory learners who also learn well from motion. Yo-yos produce a buzzing sound while twirling on the string. It might be enough white noise to help you study, especially if you're kinesthetic; chances are, if you're yo-yoing, you'll be walking, too.

Auditory learners have the advantage in most classrooms. They learn the most from lecture, and many teaching styles cater to this learning style. That doesn't mean that all do, or that auditory learners won't still have to work to learn. It'll just be a bit easier for them, sometimes, then for others. But they still have to work.²⁶

Because of learners' excellent listening skills, auditory learners would make excellent pathologists, disc jockeys, and inusicians.

²⁶Mary Jo Manzanares. "The Auditory Learner" (http://www.dirjournal.com/guides/stu/ly-tips-for-audio-learners/,2006. Accessed on May 22, 2009)

2.3.3. Kinesthetic

People who have a kinesthetic or tactile learning style learn best when they can touch or feel what they are learning about. A kinesthetic learner is a hands-on kind of person. They need an interactive experience to maximize the learning process, and frequently grow bored in a lecture situation.

If kinesthetic learners are stuck in a traditional classroom or educational mode, they will need to take regular breaks, stand and stretch on occasion, and may need to have chewing gum or a snack handy to provide a little physical release as wel!.²⁷

The use of their body and feelings are very important to these learners so hands-on projects work best for them. Kinesthetic learners do not always have a good time sense or sense of orderliness or neatness. They often live for the moment and do not have a vision of the future.

Kinesthetic learners will often speak of their learning in terms of feelings, prefacing statements with "I feel". People with this learning style will have a tendency to move around while trying to solve a problem. These learners will have the most difficulty with the "typical" written distance education course. They need to look for courses, which are more projects oriented where course content can be learned by doing it or using it. Learning in their own space will

Mary Jo Manzanares. "The Kinesthetic Learner" (http://www.lcadershipturn.com/the-kinesthetic-learner/2006. Accessed on May 22, 2009)

allow for the desire for movement as there will be no expectation of sitting still for an extended period of time.

Kinesthetic learners like application projects more. They should be sat at the front of the lecturer. The lecturer closes them some times and gives smooth touch for them. Give them a small job when they cannot keep to silent but still in the control. It means that kinesthetic or tactile learners learn through, moving, doing, and touching.28

Career choices for people with this learning style should be anything that involves movement and their body such as dancing, acting, construction, or athletics.

2.3 The Characteristics of Learning Style

The characteristics are the sign of something that it will be valuable to provide an expression. Every learning has its characteristic hence none is better than others but they have a unique typical. Everyone has a learning style, but each person's is a unique as a signature.²⁹ Each signature appears to be influenced by both nature and nurture, is a biological and developmental set of characteristic. There are characteristic to show up each learner. They are:

2.3.1. Visual Learner

- a. Systematic and thorough
- b. Speak quickly

 ²⁸ Barbara Prashing. The Power of Lecrning Styles (Bandung: Mizan. 2007), 19.
 ²⁹ Joy M. Reid. Learning Styles In The ESL/EFL Classroom (Boston: Heinle & Heinle, 1995), 34.

- c. A good long period planner and manager
- d. Careful in detail
- e. Pay attention in performances, not only in fashionable but also in presentation
- f. A good speller.
- g. Memorize what they see not what they listen.
- h. Find graphs and charts easy to understand
- Recognize places that have been before, even when was very young
- j. Tend to doodle when concentrating
- k. Easily imagine how an object would look from another perspective
- 1. Can read a map easily

2.3.2. Auditory Learner

- a. Talking themselves when they work
- b. Care to noisy
- c. Lips activity and pronounces what they read
- d. Read loudly and listening
- e Can follow rhyme and kinds of sound
- f. It is easy to make up stories
- g. A good listener.

2.3.3. Kinesthetic Learner

- a A slow speaker
- b. Focus on physic

- c. It easiest to solve problems when doing something physical
- d. Physically well co-ordinate
- e. Play a sport or dance
- f. Can throw things well darts, skimming pebbles, Frisbees.
- g. Love adrenalin sports and scary rides
- h. Enjoy and good making things or good with hand
- i. Tactile person
- j. Never use instructions for flat-pack furniture
- k. To learn something new just get on and try it
- 1. Find ball games easy and enjoyable
- m. Neat
- n. Diligent.

2.4 The Use of Phrases

Learning can take place best when the individual needs of learners such as their prior knowledge looks like learning styles. 30

- 2.4.1. If a visual learner, may use words and phrases like:
 - a. I see what you mean.
 - b. I just don't see it.
 - c. Can you show me what that would look like?
 - d. See if you understand this.
 - e. In my view...

³⁰ Bobbi DePorter and Mike Hernaki. Quantum Learning (Bandung: Kaifa, 1999), 122.

2.4.2.	If an auditory learner, use words and phrases like:
	a. I hear you!
	b. Please repeat that for me!
	c. Will you explain one more time?
	d. Can you tell me what that would look like?
	e. It is clear like a bell.
	f. I hear you carefully.
	g. It is pronounced clearly.
	h. Detail explanation
	i. Listen carefully!
	j. Fairly
Mary Jo Manz Robbi Deporte 85.	ranares. "The Visual Learner", 2006, er, Mark Reardon, & Sarah Nourie. Quantum Teaching (Bandung: Mizan, 1999),

f. In my opinion.....

Brightly.....

Narrow view.

Similarity.

No doubt.

n. It is beautiful³¹

p. Let's have a look at that³²

o. Show me!

m. Shower

h. Privately...

It is beautiful looks like a painting!

- k. Say fairly
- 1. To say opinion in the hearing space.
- m. Bored dialogue.33
- n. Tell me!
- o. Let's talk it over!34

2.4.3. If a kinesthetic learner, may use words and phrases like:

- Let me try that.
- Can you watch and see if I'm doing this correctly? b.
- I'll tackle that after I take a break.
- Survive! d.
- e. I feel that you are.....³⁵
- How do you feel?³⁶

2.5 The Thinking Styles and the Learning Styles.

Visual-Auditory-Kinesthetic (VAK) identity system differ the process of the information to the brain. To support it every learning style has their thinking styles. Every thinking style possibly will have more than one learning style. According to Anthony Gregore, A Professional Curriculum and instruction in Connecticut University, this form presents the thinking styles quadrant and the learning styles inside to decide the

Mary Jo Manzanares. "The Auditory Learner"
 Robbi Deporter, Mark Reardon, & Sarah Nourie. Quantum Teaching (Bandung: Mizan, 1999),

³⁵ Mary Jo Manzanares. "The kinesthetic Learner"

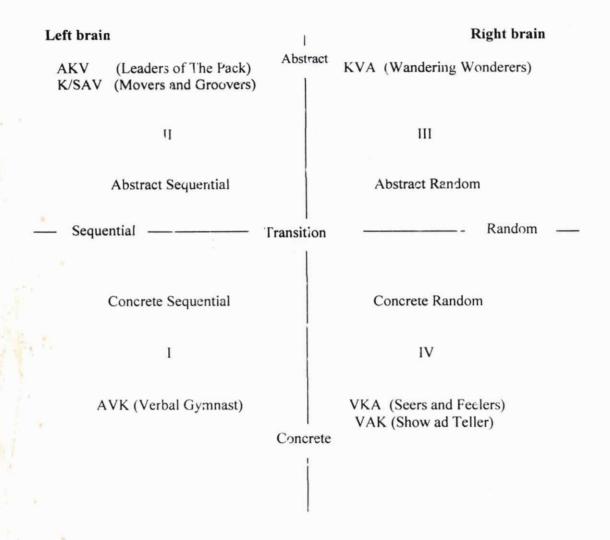
³⁶ Robbi Deporter, Mark Reardon, & Sarah Nourie. Quantum Teaching (Bandung: Mizan, 1999), 85.

brain dominant. His research concludes that there are two possibilities of brain, including:

- a. Concrete and abstract perception
- b. The ability of sequential (linier) and random (non linier) controlled.

The Professional Curriculum and instruction in Connecticut University combines two possibilities of brain to be four combinations group and in the term them as thinking styles. Gregore calls them as Abstract Sequential, Abstract Random. Concrete Sequential, and Concrete Random. The sequential category have tendency to left brain and the random thinkers are right brain. Knowing the thinking styles can support to optimally learning styles. There is transition between the sequential and concrete. It shows the change to these two groups.

To make clear and easier the explanation between learning styles and thinking style, the researcher presents their scheme in the four quadrants of thinking styles and the learning styles is followed:



The first Quadrant is Concrete Sequential. They are controlled, conservative, planned, organized, and administrative in nature and perfectionist. The Concrete Sequential thinkers are detail oriented can memorize fact, data and pattern easily because that they are in the concrete

concept. It consists of something which they can see, touch, hear, feeling and smell. They learn while practice.³⁷

Auditory-Visual-Kinesthetic (AVK) as Verbal Gymnast is in first quadrant. They are Auditory Learning Style that is followed Visual-Kinesthetic Learning. The learners are Auditory-Visual-Kinesthetic (AVK) styles are orator well and their verbal ability convey the intelligent.

Auditory-Visual-Kinesthetic (AVK) has dominant in debate, joke and diction. In these styles, the learners are easier in academics than physics duties or sport. They have not motivation physic contact and show up their feeling.³⁸

The second Quadrant is Abstract Sequential. They are analytical. mathematical, technical and problem solving, sensation thinking builds information and knowledge in a logical progression. The sequential tester will seem to get off to a faster start. They will build test plans she goes, systematically.

Not having a piece of information will not normally prove to be a problem for a sequential tester, as they will work with the information that he does have. However, they quickly becomes able to create detailed, complex tests that often draw on connections that other people on the testing team have not seen.³⁹

³⁷ Charles Cave and Ned Hertmann. "The Four Quadrant Model of the Brain, combined the Triune Brain model of Paul McLean with the Left/Right Brain" (http://models-of-learning - styles, Accessed on June 10,2009).

³⁸ Bobbi DePorter and Mike Hemack. "Quantum Business" (Bandung: Kaifa, 2001). 139.

³⁹ Charles Cave and Ned Herrmann. " The Four Quadrant Model of the Brain, combined the Triune Brain model of Paul McLean with the Left/Right Brain"

Besides that, the Concrete Sequential thinkers are in the theory and thinking. They often analyse new information and think something concept. Their processes of think are logic, rational, intellect, and they like new information when the information is systematically. 40

Auditory-Kinesthetic-Visual (AKV) and KAV (Kinesthetic-Auditory-Visual) are in the second quadrant. One of them is AKV (the dominant is Auditory Learning Style that is followed Kinesthetic-Visual Learning Style) thinkers. They are much energy and leadership. They show up their feeling correctly. AKV is similar to AVK (the dominant is Auditory Learning Style that is followed Auditory-Visual-Kinesthetic Learning Style) learners that has dominant in debate, joke and diction but they are generally recognized success in physic and sport.

In addition, KAV or K/SAV is in the second quadrant. They have dominant Kinesthetic Learning Style that is followed Kinesthetic-Auditory-Visual Learning Style. They are oriented to physic activity and mover. They learn in touching, practicing, and doing. Athletic are naturally for them and they cannot concrete in visual material.⁴¹

The third Quadrant is Abstract Random. They are global learner needs critical pieces of information in order to get the understanding of the subject. A global tester will get off to slower start they may have problems understanding the point of the application (or their area within it).

⁴¹ Ibid, 139

⁴⁰ Bobbi DePorter and Mike Hemacki "Quantum Business" (Bandung: Kaifa, 200 I.), 134.

Moreover, this quadrant needs to be shown how to use the application in order to have any idea how to test it once he gets the piece of information that brings it all together for him, however, he are quickly becomes able to create detailed, complex tests that often draw on connections that other people on the testing team have not seen.

Besides that, they need a few times to think new information before they make a decision or have an opinion. Abstract Random has a good memory if the new information is presented which is good for them. In this quadrant, they do not like structural environment and they orients to the people. If they have some duties, it will work well when this style on their creativity. 43

Including this quadrant is KVA (The dominant is Kinesthetic Learning Style that is followed the Visual-Auditory learning style) learners. They are Wandering Wonderers and whole thinkers. KVA learners learn to see others people attitude. They have difficulty to show up their feeling. 44

The fourth Quadrant is Concrete Random. They are interpersonal. emotional, musical spiritual, the "talker" modes, and intuitive feeling when they are looking for a solution to troubles. 45 They have similarity to the first Quadrant is Concrete Sequential which in physically world but

45 Charles Cave and Ned Henmann. "The Four Quadrant Model of the Brain, combined the Triune Brain model of Paul McLear, with the Left/Right Brain"

⁴² Charles Cave and Ned Herrmann. "The Four Quadrant Model of the Brain, combined the Triune Brain model of Paul McLean with the LeftlRight Brain"

⁴³ Bobbi DePorter and Mike Hemacki "Quantum Business" (Pandung: Kaifa, 200 I.), 134.

⁴⁴ Ibid, 140.

they are more unsystematically and trying feeling. They oriented to the process than the result and it causes to spend much time. They often look for alternative way to do some duties and explore an idea or new system. They adopted the process of divergent to styles of thinking.⁴⁶

VKA and VAK are in the fourth Quadrant. VKA (the dominant is Visual Learning Style that is followed Kinesthetic-Auditory Learning Style) and VAK (the dominant is Visual Learning Style that is followed Auditory-Kinesthetic Learning Style) learners are see's and feelers. Reading and seeing are easy activity for them but they are slow on verbal sign. They are systematically.47

2.6 The Finding of The Previous Study

In one study of adult learners of ESL, Joy Reid found some significant cross-cultural differences in visual and auditory styles. By means of a self-reporting questionnaire, the subjects rated their own preferences. The students rated statements like "When I read instructions, I learn them better" and "I learn more when I nuke drawings as I study" on a five-paint scale ranging from "strongly agree" to "strongly disagree."

Among Reid's results: Korean students were significantly more visually oriented than native English-speaking Americans; Japanese students were the least auditory students significantly less auditory inclined than Chinese and Arabic students.

 $^{^{46}}$ Bobbi DePorter and Mike Hemacki "Quantum Business" (Bandung: Kaifa, 200 I.), 134. 47 Ibid, 140.

Reid also found that some of the preferences of her subjects were a factor of gender Length of time in the United States, academic field of study, and level of education. Such findings underscore the importance of recognizing learners' varying style preferences, but also of not assuming that they are easily predicted by cultural/linguistic backgrounds alone. 48

⁴⁸ Joy M. Reid. Learning Styles In The ESL/EFL Classroom (Boston: Heinle & Heinle, 1995).