INFLUENCE OF STUDENT'S LEARNING BEHAVIOR ON LEARNING ACHIEVEMENTOF LOWER SECONDARY SCHOOL STUDENTS IN VIENTIANE CAPITAL, LAO PDR

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ABSTRACT

The purposes of this research were to study the level of learning achievement of lower secondary school students in the Vientiane Capital, Lao PDR, to examine the level of student's learning behavior of lower secondary school students in Vientiane Capital, Lao PDR and to explore the influence of student's learning behavior on learning achievement of lower secondary school students in Vientiane Capital, Lao PDR.

This research was conducted by using quantitative methods. The sample was 463 students of grade 4 lower secondary school students in Vientiane Capital, Lao PDR. Data was collected by questionnaires. Frequency, mean, percentage, standard deviation and multiple regression analysis were applied as statistical analysis tools.

The research finding indicated that the level of learning achievement of student was mostly good level to an excellent. The level of student's learning behavior followed by learning style of Grasha & Reichmann in every aspect was at a high level except the avoidant style and competitive style which were at the moderate level. Student's learning behavior followed by learning style of Grasha & Reichmann 3 aspects such as: collaborative style, avoidant style and independent style jointly had influenced the learning achievement.

Recommendations are that teachers should advise and encourage student know how to adapt to the right way of learning productively.

KEY WORDS: LEARNING BEHAVIOR/ LEARNING ACHIEVEMENT

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CHAPTER I
INTRODUCTION

1.1 Background and Rational of the Study

Any country can develop itself to become successful in ending the cycle of poverty. The quality of the human population however plays a very important role in this struggle. On the current situation of globalization or in the era of information technology, all countries are racing among each other against the heavy competition of social, economic and political dimensions of development. Each country is aspiring to become stable and reach certain degree of progress equivalent to that of other developed or first world countries. For this reason, the least developed countries are attempting to promote and improve their human resources or their working population. This developmental aspiration is a necessary occurrence that could not be avoided. But to develop the population to attain development goals, the state must first prioritize and promote education that is highly effective and responsive at all levels. Human resources to become productive will have to depend on the quality of education delivered on a very efficient manner.

Lao People's Democratic Republic is a landlocked country situated between 5 countries such as: Cambodia, Republic of China, Myanmar, Thailand and Vietnam. The population of the Lao People's Democratic Republic represents a rich and interesting mix of ethnic groups constituting a significant asset in the country's human resource base. There are 5.6 million people, from the Population Census 2005(Education Sector Development Framework, 2009-2015). Vientiane is the Capital of Lao People's Democratic Republic which located on a curve of the Mekong River, the area was originally settled because of fertility of the surrounding alluvial plains, and Vientiane became the Capital city of Laos around the mid-16th century.

Lao PDR still belongs to the "least developed country". Article 22, of the Constitution of Lao PDR (2003) had determined that "The state attends to developing education and implements compulsory primary education in order to build good

citizens with revolutionary competence, knowledge and abilities. The state and society attend to developing high quality national education, to create opportunities and conditions in education for all people, throughout the country, especially people in remote areas, ethnic groups, women and disadvantaged children. The state promotes private sector investment in the development of national education in accordance with the laws".

It has been stated in the constitution that education of Lao people must develop complete aspects of human being covering both physical and emotional, intelligence, knowledge, moral, ethical and cultural life. It should further support people to have equal opportunity on access to education. Education must also be consistent with the changes in the social-economic and political environment and be responsive in the progress brought about by modernity to science. It should make learners have the potential in the competitive world by ensuring high quality education system equivalent to international standards.

In the Education Sector Development Plan (ESDP) (2011:2015), the Lower Secondary Education (LSE) plays a very important role. It has the policy in improving the quality and relevance of education, such as: i) To expand the number of Primary schools of Quality with extension of the policy to secondary level; and ii) To improve the quality of secondary school graduates through the additional years and new curriculum for lower and upper secondary. From these policies, it could be seen that the Government of Lao PDR aims to manage Education for all youths and give an opportunity to all in having access in completing Lower Secondary Education level.

The education in lower secondary school in Lao PDR is under the regulation of Department of Secondary Education, Ministry of Education and Sports (MoES). It comprises of 4 grades of schooling such as: grade 1 to grade 4. Before 2010-2011, it comprised only of 3 grades, such as, grade 1 to grade 3. Ministry of Education and Sport is upgrading the curriculum content of subjects. Now it covers the Lao language and Literature, Mathematic, Natural Science, Social Science, Civil instruction, Technology, Art Education, Physical Education, Foreign Languages, and Extra curricula activities.

However, the policy for lower secondary education has not been totally successful as expected. In the Vientiane Capital, where the researcher is interested with, one can see poor internal efficiency indicators of Secondary Education. The academic years in Vientiane Capital 2009-2010, 2010-2011 and 2011-2012 reflected how education in Lao PDR is being carried out. In academic year 2009-2010, promotion rate for grade 1 is 89.4; grade 2 is 90.3; and grade 3 is 91.4. Repetition rate for grade 1 is 3.0; grade 2 is 2.3; and grade 3 is 1.9. Dropout rate for grade 1 is 7.6; grade 2 is 7.4; and grade 3 is 6.7. In academic year 2010-2011, promotion rate for grade 1 is 89.3; grade 2 is 90.7; grade 3 is 91.4; and grade 4 is 92.6. Repetition rate for grade 1 is 2.6; grade 2 is 2.1; grade 3 is 2.1; and grade 4 is 0.7. Dropout rate for grade 1 is 8.1; grade 2 is 7.2; grade 3 is 3.8; and grade 4 is 6.7. In academic year 2011-2012, promotion rate for grade 1 is 90.7; grade 2 is 92.6; grade 3 is 95.5; and grade 4 is 91.9. Repetition rate for grade 1 is equal to 2.2; grade 2 is 2.0; grade 3 is 1.6; and grade 4 is 0.9. Dropout rate for grade 1 is equal to 7.1; grade 2 is 5.4; grade 3 is 2.9; and grade 4 is 7.2 (*Sources from: Department of planning, Ministry of Education and Sport*).

It can be observed that in each academic year per grade level, the promotion rates of students were quite high, but the repetition rate and dropout rate were equally high too. In academic year 2010-2011, promotion rate has 89.3% for grade 1, but the repetition rate has 2.6% and dropout rate was high at 8.1%. This means that in every 1,000 students, around 80 are leaving the school and 20 are repeating their grade level. From this, issues have sprouted on the loss of time, loss of huge budget, and loss of many educational resources.

From the Internal Efficiency Indicators of lower secondary education in Vientiane Capital, it was shown that the repetition and dropout of students were the important challenges for the education in Lao PDR because students themselves were not successful in finishing their schooling. This has impact to their sense of self-esteem. These failed students may look down on their value as persons and they may not love themselves which would impact to families as well. For the government, it made losses on budget spent to education because they were deemed useless.

Hence, the researcher is challenged to study the factors affecting the learning achievement of lower secondary students in Vientiane Capital. One of the parameters that is used to measure level of education success is students learning

achievement. If the students show good learning achievement, it means that the education process is successful. But when students show low learning achievement, it means that the education process has failed (Anthares, 2010).

Anastasi (1961) said that the learning achievement is the result from both the intellectual and non-intellectual elements. The person who is successful in the learning process depends both on these factors. The intellectual element is important on the part that affects thinking ability of individual. This a result of collective past experiences since birth. These mental abilities can be measured in many ways, such as: i) measurement on the capability of the brain; 2) the aptitude of the learner; 3) and creativity and the ability of solving the problem. For the non-intellectual element, it has an influence to the learning achievement also. There are educators that had found out based on their research that persons' level of intelligence does not necessarily mean to equal their learning achievement.

Browman (1965), in his researches, found that the level of intelligence could not be used in the prediction of the student's learning achievement. Hence, this paved the way for researchers to get interested to study the factor that is not concerned with intelligence. They hope to find out which other factors can affect learning achievement. Based on these studies, it was found that learning behavior is the factor that has been affecting learning achievement. In addition, Maddox (1963) in his studies found that learning achievement was not dependent on the mental ability of person only but also depends on learning behavior. This conforms with Ehrlech (1969) who stated that students that had good learning achievement is not necessarily an intelligent person or very clever, but have to be the person who knows the way to use the time, choose learning behavior and work diligently and efficiently.

From situation analysis mentioned by the researcher at lower secondary school in Vientiane Capital, it is being considered that a potential factor affecting the learning achievement of students could have been their learning behavior. The researcher believes, following other educators and psychologists, that aside from the intellectual factor of students and management system of schools, other equally important factors such as economic status of family, parenting styles, students learning behavior, and teachers teaching behavior may have been influencing the dropping out and repetition of lower secondary students.

Given the researcher is interested to study in particular the “Influence of Students’ Learning Behavior on Learning Achievement of Lower Secondary School Students in Vientiane Capital, Lao PDR”. This hopes to provide guideline to parents, guardians, teachers, students and be able to use it as the way to help solving learning problems, improving education outcomes, encouraging and supporting students to succeed in learning, which will then reduce the education problems and loss of time, budget, and education resources of the country.

1.2 Research Questions

From research rational mentioned above, the researcher has determined of 3 research questions as follows:

1.2.1 What was the level of learning achievement of lower secondary school students in Vientiane Capital, Lao PDR?

1.2.2 What was the level of student’s learning behavior of lower secondary school students in Vientiane Capital, Lao PDR?

1.2.3 Did student’s learning behavior of lower secondary school students in Vientiane Capital have an influence on learning achievement or not?

1.3 Research Objectives

From the research questions the researcher has determined 3 objectives of the research as follows:

1.3.1 To study the level of learning achievement of lower secondary school students in Vientiane Capital, Lao PDR.

1.3.2 To examine the level of student’s learning behavior of lower secondary school students in Vientiane Capital, Lao PDR.

1.3.3 To explore the influence of student’s learning behavior on learning achievement of lower secondary school students in Vientiane Capital, Lao PDR.

1.4 Research Hypotheses

Some factors of student's learning behavior of lower secondary school students in Vientiane Capital, Lao PDR, had an influence on learning achievement.

1.5 Scope of the Study

This research has major theme covering the factors of students' learning behavior as they affect their learning achievement. This is done by considering the average scores of every subject of the first term examination of the grade 4 students at Lower Secondary level in Vientiane Capital, academic year 2013-2014 in Lao PDR. The reason in choosing the students at grade 4 is the sample group. Because the students at grade 4, will had age of 14 years old by the criteria in the school enrollment. So, in this age they can understand questionnaires as well and can answer the questionnaire on a reasonable manner. The population is 11,184 students at grade 4 in the first term of academic year 2013-2014 of Lower Secondary school students in Vientiane Capital, with the sample of 463 students.

1.6 Research Contribution

1.6.1 This study will be information to improve the learning achievement of lower secondary school students in Vientiane Capital, Lao PDR.

1.6.2 The data from this study could be used to further develop for relate the student's learning behavior of lower secondary school students in Vientiane Capital, Lao PDR.

1.6.3 Administrators, parents and teachers should use the result from this study to suggest student used the learning style that good effected to the learning achievement.

1.7 Operational Definition of the Terms

The study of "Influence of student's learning behavior on learning achievement of Lower Secondary school students in Vientiane Capital, Lao PDR". There are important key words for understanding to be identical such as:

Students' leaning behavior refers to any behavior that student used to study, to find the knowledge, attending the activity of teaching and learning, separate time to learn, throughout the practicing itself in the classroom and outside classroom to the appropriate and consistent with their situation according to perception of students themselves.

Independent Style refers to students who like to think for themselves.

Avoidant style refers to not enthusiastic about learning content and attending class.

Collaborative style refers to typical of students who feel they can learn by sharing ideas and talents.

Dependent style refers to characteristic of students who show little intellectual curiosity and who learn only what is required.

Competitive style refers to students who learn material in order to perform better than others in the class.

Participative style refers to good citizens in class.

Learning achievement refers to knowledge ability of students learning, in this research learning achievement is Average scores every subject of the first term examination of the academic year 2013-2014 of students are learning at lower secondary level in Vientiane Capital of grade 1 to grade 4, first term of academic year 2013-2014 in Lao's People Democratic Republic.

1.8 Conceptual Framework

The student's learning behavior of Grasha & Reichmann (1996) was used to construct conceptual framework. From the concept of Grasha & Reichmann the researcher studied "Influence of student's learning behavior on learning achievement of Lower Secondary school students in Vientiane Capital, Lao PDR". By determined the independent variables were six learning styles namely collaborative style, avoidant

style, independent style, dependent style, competitive style and participative style and the dependent variable was learning achievement of students and has conceptual framework as showed in figure 1.1.

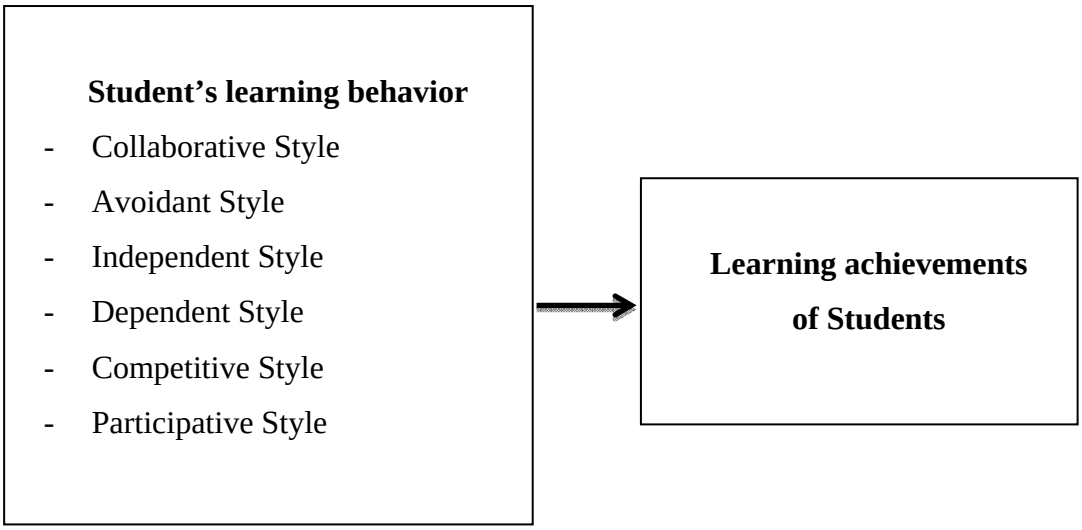

Figure 1.1 Conceptual framework

CHAPTER II
LITERATURE REVIEW

To understand better the influence of student's learning behavior on learning achievement, the study will cover key concepts and theories on learning process, student's learning behavior, and learning achievement. Other related researches will also be presented to enrich and update the perspective of the reader as follows:

2.1 Learning Theories
2.2 Concept of Student's Learning Behavior
2.3 Concept of Learning Achievement
2.4 Learning Achievement at Lower secondary school level in Vientiane Capital, Lao PDR
2.5 Related Research on Student's Learning Behavior and Learning Achievement

2.1 Learning Theories

For a large part of the twentieth century, the experimental approach to learning was dominant in the field of education. This was spearheaded by Pavlov, a Russian, and Skinner, an American. This approach focused on observable events and sought the determination of general laws. Pavlov's famous experiment measured the production of saliva in dogs following a bell rung at feeding time. Like many experiments in this field, the research sought to examine the necessary conditions (the sound of the bell) which resulted in expected outcomes (production of saliva). Skinner (1974) on the other hand explained that the best way to ensure consistency of response to a stimulus involved a schedule of selective reinforcement such that the learner did not always receive an expected reward. This led to an alternative name of "Stimulus-Response" theory.

Skinner further argued that much of the education approaches of the 1950s and 1960s ran counter to learning theory, due to the perceived emphasis on aversion (use of sanctions and negative feedback) in the classroom. However, teachers may recognize elements of this theory in the early approaches to classroom behavior management called 'assertive discipline'. Assertive teachers react confidently and quickly in situations that require behavior management. They have a few clearly stated classroom rules and give firm, clear, concise directions to students who are in need of outside control. Students who comply are reinforced, whereas those who disobey rules and directions receive negative consequence (Canter & Canter, 1976).

Psychologists often talk about an emphasis on instrumental motivation in learning theory. In learning theory, the view is that learners are motivated to learn because of what they can get, rather than for the intrinsic and unobservable benefits of learning. This focus on the unobservable benefits of learning was seen to be a significant problem especially due to the growing recognition of another theory of learning known as cognitivism which under domain of constructivism (Wood, 1998).

2.1.1 Constructivism

Constructivism is a collective term for different theories of learning, which include cognitivism. Under constructivism the learner is seen as an active participant in the process of learning with more or less prominence given to the teacher, parent or more abled peers. Learning involves changes in the way the learner adapts to the world through assimilation and accommodation. Assimilation is taking in new experiences and fitting these to current patterns of thinking, while accommodation is a process of changing existing patterns of thinking in response to new experience.

Jean Piaget had an immense and continuing influence on the understanding of how we learn (Smith, Cowie & Blades, 2003). Through learning experiments often involving young children, he developed a theory on how we learn which depicted learning as a journey through certain stages of development. From the early so-called egocentric stage, in which children only saw the world from their own perspective, they developed increasingly more abstract forms of thinking and learning by moving through other stages of development. Piaget viewed the stages of development as relatively fixed.

Readiness to pass to another stage of learning was an influential factor in the view that children should only be taught to read from a certain age at which they were ready to read. Formal methods for teaching reading in some European countries routinely only start from about the age of six to seven years of age, whilst four to five years is the common starting age range in England in 2008.

Piaget wrote about his scientific approach to learning from the 1920s onwards. Ultimately, he sought to combine logic and mathematics in his explanation of the evolution of mind (Wood, 1998). The focus was on the child, especially, as learner. At the same time, Lev Vygotsky developed a theory of learning which sought to combine a view on the development of learning and instruction. Piaget and Vygotsky did discuss their findings and each got praise upon the other's work. Whilst Piaget's career continued into the latter part of the twentieth century, Vygotsky died in 1934. His work was only brought to the attention of the West by a group of American psychologists of the 1950s. Prominent among these was Jerome Bruner.

Vygotsky saw learning as constructing new knowledge on the basis of learner's experience of action in a social context. For this reason, Vygotsky's theory of learning is called 'social constructivism'. Vygotsky (1978) explained how teachers develop 'learning possibilities' in the concept of the 'zone of proximal development'. This is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more abled peers.

Many educational programs over recent years have attempted to focus on the process of instruction by prescribing pedagogical structures and routines. This focuses on how the tutor raises the level of skill, understanding and knowledge as expected of the pupil. Vygotsky (1962) explained that the role of the teacher or more abled peer was to model skilled performance, which the learner appropriated through a process of internal reconstruction, although they are not always successful in achieving this. Vygotsky (1978) further stated that which exists on the 'inter-psychological plane' will go on to exist on the 'intra- psychological plane'. Hence external social processes go on to become the templates for internal psychological processes. Furthermore, the external control of learning initially exerted by the tutor or

more abled peer will pass to the learner by a process in which regulation of the learning is 'handed over' by the tutor to the learner. Self-regulation by the learner is an important aim for most curricula.

Bruner, like Vygotsky, emphasized the importance of language as central to the development of thinking. Dialogue is not only a mechanism for developing learning and supporting new forms of thinking, but different languages and varieties of language actually mold and influence different forms of thinking. Bruner (1983) went further to explain that language was a tool and like other cultural tools enables the learner to achieve even more sophisticated forms of thinking and learning. For instance, the written language has provided a way of representing incredibly complex scientific ideas (Darwin's theory of evolution) and artistic works of great beauty and complex emotional force (e.g. Mark Haddon's *The Curious incident of the Dog in the Night-time*), which would have been impossible in a purely oral form.

While Bruner was a loyal and prolific supporter of the work of Vygotsky, his own theoretical model of learning was highly influential. For instance, he explained that the role of the teacher or more abled peer was to scaffold learning in the aspects of an activity where the learner was unable at that point to do on their own. This includes, for instance, the following: Physical manipulation of objects on behalf of the learner; formulating approaches to problem solving to support the learner; remembering steps in a task; and emotional support for a learner during a task to maintain their attention, interest or participation. Both Vygotsky and Bruner disagreed with Piaget's concept of readiness for learning. Donaldson (1978) proved that children could understand sophisticated and abstract concepts, so long as learning was presented in an appropriate manner. For instance, up to about the age of seven, learners were unable to understand concepts presented in so-called 'disembedded' abstract contexts.

Piaget described a task to prove that children were unable to see from the perspectives of others. This involved asking young children to describe what different figures could see on a model of a mountain. However, when Donaldson (1978) presented the same task in a different context involving a naughty policeman and different characters in a model of a high street, the children were able to describe what other characters could see. This is an important factor in current approaches to

education which seek to accelerate children's learning. Donaldson suggests that by presenting or explaining learning activities in a way which the learner can understand, more sophisticated and abstract concepts as predicted by Piaget are indeed possible. Such views are highly influential in the area of early year's education: Play-based child-led activities are suggested to be more effective than formal forms of learning in the early years, because learners approach tasks in a more contextually appropriate way.

Whilst our understanding of how people learn is still dominated by theorists such as Bruner, Vygotsky and Piaget, technological advances have provided alternative evidence to enhance our understanding of learning. These include the development of computers and models of artificial intelligence. The explanations of learning in Skinner's learning theory and Piaget's depiction of thinking in schema theory both employed elements of logical and mathematical symbolism. Ultimately, information processing theory uses an analysis of actions, their goals and the means by which these are achieved and evaluated as a framework for understanding how we learn (Wood, 1998). Whilst the reality is much more complex, all learning involves: i) *sensory perception* - auditory and visual processing of information, for example, received in the form of spoken or written language which we hear or read; ii) *attention* - strategies for maintaining an efficient focus on the most relevance information in a task; iii) *memory* - storage of information of different forms-short-term working memory whilst a task is completed and long-term memory to store previously processed information which can be accessed at a later point; iv) *metacognition* - strategies for reflecting on learning; and v) *production* - verbal or non-verbal response following information received. It is important to recognize that each of the above aspects of learning may be more or less successful. Likewise these develop throughout childhood. In many cases they continue to develop. But other features, such as short-term memory diminish as we grow older.

2.1.2 Self-regulated learning

Weinstein et al. (2000) provided an example of this approach in action. It is important to recognize that her model, like many in this area, goes beyond learning as merely a cognitive skill. She recognizes that emotions and the ability to regulate

one's own behavior are important aspects of how we learn. An emphasis on the use of learning strategies to support self-regulated learning has been shown to support an increase in the outcomes of learning (Pintrich & Schunk 1996). Weinstein et al. (2000) identified three critically important characteristics in learning strategies: they must be goal-directed, intentionally invoked and effortful. They are emphatic that cognitive learning strategies do not work in isolation. It is important that learners know the "what", "how" and "when" of using learning strategies. They describe a model of learning strategies which includes both affective and cognitive factors. At the core is the learner: a unique individual who brings to each learning situation a critical set of variables, including his or her personality, prior knowledge and school achievement history. Around this core are three broad components that focus on factors that, in interaction, can tremendously influence the degree to which students set and reach learning and achievement goals. They suggested a model of learning with three components, referred to as 'skill', 'will' and 'self-regulation'. "Skill" includes using learning strategies; finding the main idea/information; reading and listening comprehension; listening and note-taking; preparing for and taking a test; and using reasoning and problem-solving techniques. "Will" includes setting, analyzing and using goals; motivation for achievement; affection towards learning; beliefs about learning; volition; and creating and maintaining a positive mind-set towards learning. "Self-regulation" includes time management; concentration; comprehension monitoring; systematic approach to learning and accomplishing academic tasks; coping with academic stress; and managing motivation for learning and achievement.

Moreover, Claxton (1990) emphasized the social dimension to learning. He viewed learning as the development of informal mini-theories of learning, which developed in response to real life learning. This is similar to Piaget's idea of 'accommodation'. Claxton thus offers a constructivist interpretation of learning, in which children's problem-solving capacities develop from their experience of dealing with problems in real situations. Claxton suggests that play itself incorporates potential ways of enhancing learning. Play-based learning in the early years, for instance, once developed for the purpose of having fun, can develop into a more generalized learning strategy for self-empowerment. Application of the theory in differing contexts allows the activity or procedure to become more adaptable and generalizable. Application of

the mini-theory, according to Fisher (1990), can be used by the learner to develop a tool-kit for repairing learning in future similar situations. This is a feature commonly identified in the literature of self-regulation. For example, Wood (1998) identified strategies to repair communication break-down as an important high-level skill.

Claxton (1990) summarized his position in the following: 'Every learning experience is not only an invitation to improve our theories about the world; it is also an opportunity to improve our implicit theories about theory-building: to become a better learner. His evidence of how we learn is very much located in the classroom and reflects on learning in an authentic setting.

2.1.3 Learning in different contexts

In a sense, all learning happens in various contexts. But this time, the researcher will review learning outside the experimental setting. Eraut (2000) explained that our understanding of learning should not be limited to just formal or conscious forms of learning. For instance, he considers various forms of informal learning: i)implicit learning - where learning is not undertaken in any conscious way, and there is no conscious knowledge of what has been learned; ii) reactive learning - which is seen as being near spontaneous in its development. The knowledge from this type of learning is only marginally open to conscious interrogation; and iii) deliberative learning - which takes place in a planned context, and is the most open of informal learning to conscious reflection.

So, much of what we focus on in the classroom relates to Eraut's description of 'deliberative learning'. Hargreaves (2003) identified the predominance of an 'objectives model of learning' in English schools. This involves an approach to the curriculum and teaching in which the teacher defines learning objectives in planning then broken down to complex activities into a range of objectives which are 'taught' by the teacher to encourage 'learning' by the children. She explains that the National Curriculum (Qualification and Curriculum Authority, 1999) and national testing arrangements in England have driven this. An 'objectives model of learning' and teaching tends to ignore implicit and reactive learning. Such learning is not necessarily measurable and naturally can deviate from the programme of objectives outlined in any curriculum. Quoting Dann, she said: "Children are expected to demonstrate the

objectives identified. They have no scope to shape, negotiate or deviate from these objectives. Together these theories underpin the role of the pupil as a mechanical agent who will react to the contexts and information given to him/her (Dann, 2002)".

Tacit knowledge is the understanding of people, situations, and routines which develop from implicit learning. Eraut (2000) pointed out the dilemma in investigating any forms of tacit knowledge because the problem is compounded by the children's inexperience in reflection and their limited vocabulary for discussing learning. It should not however be dismissed as being unimportant as Eraut says that a person may be socialized into the norms of a school or the classroom without being aware either of the learning or of what the norms of the class are. This is a very important point. Teachers and learners need to be aware of the wider view of learning. Teaching and learning operates at an explicit level in the traditional classroom activities which we see in school, such as whole class activities to promote reading or writing in primary school. But the so-called 'hidden curriculum' is equally important (Pollard, 1997). Teachers communicate their intentions as to the type of learning and goals of the classroom in both implicit and explicit ways. While learning happens beyond the formal setting of the nursery or school, these are very important contexts for learning. It is important to understand therefore the characteristics of learning at the first stage of formal education.

2.1.4 Learning in the Early Years

Much learning in the early years is of a less formal, play-based form, often led by the interests of the child (Smith, Cowie & Blades, 2003). It allows children to build on their first experiences of learning and development at home, and provides them with the opportunity to explore the physical, social and emotional world of the nursery or playgroup. Play contributes to learning in many different ways: i) *physical activity*: as a young baby rhythmical kicking and bodily movements are an early form of play; ii) *rough and tumble play* - play fighting between children is common from the age of three years-for children who have less well-developed social skills, this can turn into real fighting; iii) *games with rules* - for example, games like 'tag' where you have to catch someone; iv) *practice play* - acting out a situation in preparation for or in response to a real life event; v) *fantasy and pretend play* for example, playing out

stories or variations of stories based on a TV or computer game; and vi) language play- if there is evidence of simple language development from about the age of 12 months, it is clear that play has an important role in enabling children to experiment with new sounds, ways of combining words and making meaning. At early stages of development, pretend play relies heavily on realistic objects, but as children grow older, they are able to use less realistic objects to imagine real life situations. This very much mirrors what we said early about the importance of disembedded or decontextualised learning later in childhood (Donaldson, 1978). On the other hand, whilst it might serve as an opportunity to practice language, playing with sounds and words also has an important role in entertaining and bonding with others. Of course, language of a social or exploratory nature may accompany any of the above forms of play.

Long before Vygotsky's original writings, other European theorists had re-evaluated the educational significance of play. Learning can of course be different in different cultures but Froebel saw development from within the child as important. The 'kindergarten' or 'child garden' reflected Froebel's views of the child: 'Play, truly recognized and rightly fostered, unites the germinating life of the child attentively with the ripe life of experiences of the adult and thus fosters the one through the other (Froebel, 1906).

Maria Montessori is still hugely influential in the field of early years learning (Smith, Cowie & Blades, 2003). While she saw the value of self-initiated learning, it was her belief that children should be encouraged to learn about real life through real activities rather than pretending through socio-dramatic play. Thus children in a Montessori early years setting will be encouraged to take ownership of their own learning in as authentic a way as possible. In the earliest traditions of Montessori, children would be encouraged to serve food themselves, rather than just play at serving food.

Play is widely considered amongst early years' institutions as an important way for children to learn. However, it is not without its critics. Brian Sutton-Smith (1986) for instance argued that many theories of play are merely an 'idealisation' of the needs of the child. He sees theories of play as reflecting more the needs of adults in organising and controlling children, rather than the actualities of children's behavior

(Smith, Cowie & Blades, 2003). Sylva, Roy & Painter (1980) highlighted that different forms of play can be more or less effective in helping young children to learn, such as: i) High-yield play is structured with some kind of goal and a means to achieve it (e.g. building, drawing or solving puzzles); and ii) Low-yield play is informal and involves unstructured social playing (e.g. rough and tumble games). (Smith, Cowie & Blades, 2003). This view is in itself controversial, as Sylva, Roy & Painter (1980). define 'yield' in cognitive terms, whilst social, emotional and affective aspects are no less important in children's learning. In a sense, the 'higher yield' activities are those which resemble more closely the cognitive demands of the later more formal curriculum of schools.

2.1.5 School learning

Learning in school is rather paradoxical. At home, children generally ask questions and adults try to answer them. While in school, children answer question posed by their teachers who generally know the answers. The young child is often thought of as a little scientist exploring the world and discovering the principles of its operation. We often forget that while the scientist is working on the border of human knowledge and is finding out things that nobody else yet knows, the child is finding out precisely what everybody already knows. (Newman, 1982)

If the child is seen to be at the center of learning in the early years' philosophy (Smith, Cowie & Blades, 2003), then the aims of state to mainstream education in England seem to be more balanced between development of the child as an individual and socialisation of the child into the norms of society and the particular culture of the school community. Of course, the patterns of socialisation of the home may be different to those in school. The relationship between home and school can create conflict and can affect educational success or failure. If the culture and patterns of socialisation between home and school are different, should the responsibility for change lie with the school or home? Or should the 'learner' move to a school setting where the patterns of socialisation are nearer to that of the home? What do pupils bring to the learning process? How can teachers become responsive to this? In English, even with other subjects, these are particularly important questions, since pupils are required to demonstrate knowledge and understanding of texts and issues

which are open to interpretation. Opinions must be justified with evidence, and arguments must be well-founded with a logical sequence of thought. Their interpretations of and responses to texts, though mediated by the pedagogical support of the teacher, will nevertheless be further mediated by the prior knowledge, attitudes and skills which the learners bring to the activity.

The traditional conception of the passage through the 'zone of proximal development', is of a teacher leading a learner by the hand-down avenue, and at a certain point when they are able to find their own way to the destination, the teacher is letting go and the pupils makes their own way to the end of the road. The pupil comes on the journey sometimes with an idea of how to get to the destination, may be with a compass, a map or the ability to ask passing people the right direction. The pupil may be a willing traveller. They may like and respect the person they are travelling with, or indeed they may be so scared of that person that they are only travelling under coercion. Their intention may be to a school off down a side alley, as soon as the opportunity arises. Others may accompany the child on the journey, happy to enjoy the social interaction. Alternatively, as the teacher and pupil walk down this road of learning, there may be a gang of kids jeering mockingly at the pupil. For some pupils this may be enough to deter them, others may be resilient enough to ignore such distractions, and others may have to weigh up the choice between popularity within the peer group, and a successful trip along the road to learning. Of course, this metaphor can be taken further. What if the local community is hostile to those who walk the road of learning?

Pupils bring skills, knowledge and attitudes, which can facilitate or indeed block their passage through the zone of proximal development. This is the pupils' learning journey. In school learning and instruction take various forms. Teachers have a range of routines to encourage learning through instruction:

2.1.5.1 Rote learning

This involves learning facts or routines by heart. This may be helpful in certain areas of knowledge (numerical facts and laws, for example); but not in others (learning about characters in literature, for example, where the skills of interpretation and the development of empathy are important).

2.1.5.2 Investigations

Learners will carry out an activity to further develop their understanding of a topic, either with or without a firm indication of how to approach the task from the teacher. This can be a very effective way of supporting learning in both sciences (for example, investigating the properties of different materials) and the arts (for example, investigating patterns of spelling in English).

2.1.5.3 Group learning

Whilst this is a way of organising learners and the classroom, small groups of four to five learners can be a very effective way of supporting dialogue. Variations of this involve learners moving between groups to share information.

2.1.5.4 Paired learning

Pairing learners can develop dialogue and interactive learning in a way which is impossible where the teacher is teaching a whole class. For instance, asking pairs of learners to discuss a question before sharing individual responses in the whole class can promote a greater degree of pupil involvement and talk for learning of a higher quality.

2.1.5.5 E-learning and the use of technology

University teachers have been using Virtual Learning Environments (VLEs) for the last decade in their taeaching programme. These involve a range of tools to support learning: learning objects (such as multiple-choice questions for self-testing), discussion broads, documents (text, graphics, sound and film) to support learning and various ways of communicating with learners (e-mail announcements, etc.). Such technologies are now being developed for schools as we move towards the end of the first decade of the twenty-first century. Schools, on the other hand, have already made significant use of different presentation (interactive whiteboards and projectors) and response tools (voting systems).

Whilst the above list is not exhaustive, it is important to recognise that there are a range of teaching and learning strategies which learners will experience in

school. The relationship between teaching strategies and pupil self-support learning strategies is a dynamic one. Wood (1998) proposed a 'principle of contingency' by which teachers help children to contruct local expertise (connected with that particular task or group of tasks) by focusing their attention on relevant and timely aspects of the task, and by highlighting things they need to take account of. This principle also encourages teachers to break the task down into a sequence of smaller tasks that children can manage to perform. He suggests that effective teaching through the zone of proximal development gives only that level of support which enables the learners to accomplish it successfully. It calls for a combination of a suitable level of challenge and support. He considered that many lessons taught in school often involve tasks that do not have a clear, obvious structure and may not yield single 'right answers'. As Pollard (1985) would say, this reflects the dilemma that pupils and teacher face in the classroom, leading to the development of coping strategies in order to balance the competing and often irreconcilable issues.

Pollard (1988) described the process of learning from a sociological as well as a psychological point of view. Whereas teachers are under the spotlight to achieve certain outcomes with their pupils, regardless of the background or starting point of the learner, the students themselves may be disengaged and demotivated as a result of an irrelevant state curriculum or prescribed teaching methods. In such situations there can be a gap of relevance between the school curriculum and the priorities of the learner. Whilst there are several options open to the learner and teacher in such situations, all ultimately provide a means for both the teacher and learner to survive in a challenging and potentially irreconcilable context. For instance, many teachers and learners report the importance of humour and banter in the secondary school (Hewitt, 2008) as a way of getting through the lesson. Whilst most teachers and pupils would argue for the importance of an interesting curriculum in itself, most would also agree that the particular demands of the school learning context provide considerable pressures and 'coping' itself may be a positive outcome.

Learning is a complex, controversial and problematic process. Research into how people learn has produced as many theories as there are learners. How we learn reflects society in general. We very often focus on thinking and so-called

cognitive skills in learning; but social and emotional factors are equally part of thinking and learning. The reality of classroom learning suggests that learning itself may be more a vehicle for socialisation as ultimately what we learn becomes less important than how we learn. The journey of learning is therefore more important than its destination (Hewitt, 2008).

2.2 Concept of Student's Learning Behavior

2.2.1 Definition of Learning Behavior

Learning behavior is mixed from two words that is the word "learning" and the word " behavior" therefore when known each those words will have the meaning of the word learning behavior. For the word learning there were who gave the meaning as follows:

Daniel *et al*. (2009,2011) described that the learning is the act of acquiring new, or modifying and reinforcing, existing knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information. The ability to learn is possessed by humans, animals and some machines. Progress over time tends to follow learning cuves.. Learning is not compulsory; it is contextual. It does not happen all at once, but builds upon and is shaped by what we already know. To that end, learning may be viewed as a process, rather than a collection of factual and procedural knowledge. Learning produces changes in the organism and the changes produced are relatively permanent.

Roungrueangthum (1979) stated that "learning is the changing behavior to make the learner attain higher growth. It is an improving experience which the individual expresses whilst in the classroom".

From the statements above, it could be summarized that learning is is the act of acquiring new, or modifying and reinforcing, existing knowledge, behaviors, skills, values, or preferences and may involve synthesizing different types of information and is the changing of behavior to make the learner attain higher growth.

Behavior means the manner expressed by any living organism to respond to internal and external stimulus. These are the actions by which an organism adjusts

to its environment. These actions are hereditary and/or environmental (Samphoa, 2013). Hiranyato (1997) stated that behavior refers to actions that express or reactions that occur to confront with stimulus coming out from external or internal parts of the body. Skinner (1974) also said that behavior means the expression of human, either consciously or unconsciously performed.

From the statements above mentioned, it could be summarized that behavior is the manner expressed by any living organism to respond to internal and external stimulus. These are the actions by which an organism adjusts to its environment and behavior refers to actions that express or reactions that occur to confront with stimulus coming out from external or internal parts of the body.

2.2.2 The Principles and Elements of Learning

Learning achievement neither depends on the ability of teachers to teach nor relies on the preparedness of students only but it is anchored as well on the elements of learning that help the learners become successful. The educators have identified the primary principles of learning. Kreeseng (1977) had emphasized the importance of the method of the learning of students. It is these elements that influenced the behavior in the learning of students. Effective learning must have the correct method of learning as well as the key elements so students will get interested in learning. The key principles are as follows:

1) Training will help the learning more complete by letting the learners get interested. Training had been divided into 2 characteristics such as: i) holus-bolus training - this is long consecutive period; and ii) divided training- this training has resting time and therefore periodic in nature. Based on research it was found that the divided training is giving better result than the holus-bolus training.

2) To increase the learning is to increase the training. After learning, a follow through training will help remember the lessons better and remember even longer.

3) To know the accomplishment is to know what is the shortcoming of the learning and should be able to resolve the gap. Besides, that also helps the learners to become more interested.

4) By dividing the lessons into sections, teachers will have effected better the learning of the persons. Using the types of knowledge helps in the method of learning. It has made the successful aspects of each person although they are not the same. Some learn good by listening, while others learn by reading; and while still others learn by both methods together. There is no one best method to become successful.

5) By giving incentives the learning condition will increase motivation of the learners. These incentives may be used to help students become more interested in learning more.

6) Attention of the learners is necessary to attain the objectives of learning. They must have good attitude to the lessons which will cause learning automatically.

Cronbach (1963) further stated that the elements concerned with the learning is the processing that comprises seven (7) important things, such as: i) Aim – this means the thing that the learners need to learn or the thing that the learners hope to get such as the satisfaction of oneself; ii) Readiness - This refers to level of the maturity and ability in the learning of the learners. This refers to the maturity of the physical and intellectual capacity; iii) Situation - This refers to the event and environment which open the opportunity to the learners' choice in doing the activity to learn; iv) Interpretation - This refers to the consideration of the situation in choosing the method to meet the learning objectives; v) Response - This refers to the method of an activity that will supposedly get the best result in that situation; vi) Consequence - This means the result that occurred from doing that activity which may either correspond or oppose with what is expected; and vii) Reaction with Disappointment - This is when the learners could not meet the demand or the actions could not meet the expectations of the learners. They may try to use other methods that they think will meet objectives or simply give up in meeting the expectation.

Carroll (1963) said that "the elements of learning that concern the learners have three (3) characteristics such as: i) aptitude of the learning; ii) ability in understanding the things that teachers teach; and iii) the attempt to learn in the learning process".

2.2.3 The Learning Behavior

Learning behavior or learning style is an individual's natural or habitual pattern of acquiring and processing information in learning situations. A core concept is that individuals differ in how they learn (James, W.; Gardner, D. (1995). The idea of individualized learning styles originated in the 1970s, and has greatly influenced education (Pashler, H.; McDaniel, M.; Rohrer, D.; Bjork, R. (2008)).

Proponents of the use of learning styles in education recommend that teachers assess the learning styles of their students and adapt their classroom methods to best fit each student's learning style. Although there is ample evidence for differences in individual thinking and ways of processing various types of information, few studies have reliably tested the validity of using learning styles in education (Pashler, H.; McDaniel, M.; Rohrer, D.; Bjork, R. (2008)). Critics say there is no evidence that identifying an individual student's learning style produces better outcomes. There is evidence however of empirical and pedagogical problems related to the use of learning tasks to "correspond to differences in a one-to-one fashion" (Klein, P. (2003)). Well-designed studies contradict the widespread "meshing hypothesis", that a student will learn best if taught in a method deemed appropriate for the student's learning style (Pashler, H.; McDaniel, M.; Rohrer, D.; Bjork, R. (2008).

For the teachers to have a good level of learning achievement of their students, they should understand the method of learning and the behavior of learning clearly because they can serve as guidelines in the future. The methods of learning are divided into various types. Mann (1967) had studied the behavior of the learning of students and had divided the method of learning into 8 styles, such as: i) the consent style - is the character of the learners that abides only and very pleasing to friends of teachers who are teaching other persons; worried style - if the learners have more teachers who teach and consider themselves to do anything that must depend on the teachers; the discouraged style - the learners has attitude negative to themselves; independent style - this group of the learners have the characteristic of a person who has high maturity than another person. He has a better intellect, responsible, and has self-confidence; hero style - this group of the learners are the persons who are front line of friends in the classroom. They are known as popular persons, famous in learning and takes the role to protest; an antagonist style - this learners are pessimistic

about the their ability and their relation with teachers and they have another power the learners have to be proud in themselves in low level; seek for an interesting style - this styles emphasizes more on the social than the intelligence. The learners need to enhance their relationship with teachers and friends by any other methods; and peaceful styles - this group of learners are the persons who do not participate in discussing the learning activity. They are quiet persons and are silently not doing anything in the classroom or outside classroom.

Bandt & others (1974) on the other hand had classified the learning styles into 12 styles such as: Illusory style - this learner uses almost the times to concentrate in learning like writing a summary of the long lecture, makes it a new lecture that can be read easily. Learners use this learning cram to remember, but neglect learning. Seek Peace learning style - this learner is the person who loves quiet and interesting work. When they go into classroom the learners will try to copy or note down everything that they heard in the book after that they find message or word or the things that they noted down that they cannot understand. Thinker style - This learner tries to find the individual theory that relates with all items. The learner likes to ignore the learning. The detective style - This learner's type is the person who donates times for seeking to find the detail of everything so that there is a work to do more. The Intellectual prisoners' style - This learner is the person who is very limit and uses the learning using the small ability in working such as: looking for the answer before trying make problem. The specific expertise style - this learner is clever in doing everything that they are used to practice and like to show the ability to invent the things. The solitary style - This learner's type will take advantage of knowledge that they get from every stories. Each story separates from all other story. The reformer style - this learner type has an idea that is popular to themselves and will lead to the acknowledgement and interpretation. The illusion style - this learner type does not pay attention to the learning or they simply cram in any period of time. The dissimulate style - this learners like to borrow their friend's note book or ask friends to help to do homework, try to make friends believe that they read a book a little, but in fact they read all the book. Practice style - this learner will attempt to find the things that they hope to expect in learning and process out their way. The creativity style - this learner has

target to have individual knowledge out of the things that they learn. It is the critical way and understands the content deeply.

Moreover, Grasha & Reichmann (1996) studied the behavior of the learning of students and had consolidated and categorzied the method of the learning into 6 styles such as: Independent Style: This refers to students who like to think for themselves. They prefer to work on their own but will listen to the ideas of others in the classroom. They learn the content they feel is important and are confident in their learning abilities. Avoidant Style: This refers to not being enthusiastic about learning content and attending class. They do not participate with students and teachers in the classroom. They are uninterested and overwhelmed by what goes on in class. Collaborative Style: This refers to type of students who feel they can learn by sharing ideas and talents. They cooperate with teacher and peers and like to work with others. Dependent Style: Means Characteristic of students who show little intellectual curiosity and who learn only what is required. They view teacher and peers as sources of structure and support and look to authority figures for specific guidelines on what to do and how to do it. Competitive Style: This refers to students who learn material in order to perform better than others in the class. They feel they must compete with other students in a course for the rewards that are offered. Participative Style: This refers to good citizens in class. They enjoy going to class and take responsibility for getting the most out of a course. Want to take part in as much of the course activity as possible.

On the other hand, the Learning Style Inventory (LSI) is connected with Kolb's model and is used to determine a student's learning style (Dunn & Dunn, 1978). The LSI assesses an individual's preferences and needs regarding the learning process. It does the following: i) Allows students to designate how they like to learn and indicate how consistent their responses are; ii) Provides computerized results which show the student's preferred learning style; iii) Provides a foundation upon which teachers can build in interacting with students; iv) Provides possible strategies for accommodating learning styles; v) Provides for student involvement in the learning process; vi) Provides a class summary so students with similar learning styles can be grouped together (Dunn & Dunn, 1978).

A completely different Learning Styles Inventory is associated with a binary division of learning styles, developed by Felder and Silverman. (Felder, 2012). In this model, learning styles are a balance between four pairs of extremes: Active/Reflective, Sensing/Intuitive, Verbal/Visual and Sequential/Global. Students receive four scores describing these balances (See Soloman, & Felder, 2012). Like the LSI mentioned above, this inventory provides overviews and synopses for teachers.

Various researchers have attempted to hypothesize ways in which learning style theory can be used in the classroom. Two such scholars are Rita Dunn and Kenneth Dunn, follow a VARK approach. This approach believes that although learning styles will inevitably differ among students in the classroom, the teachers should try to make changes in their classroom that will be beneficial to every learning style. Some of these changes include room redesign, the development of small-group techniques, and the development of Contract Activity Packages. Dunn & Dunn, 1978). Redesigning the classroom involves locating dividers that can be used to arrange the room creatively (such as having different learning stations and instructional areas), clearing the floor area, and incorporating student thoughts and ideas into the design of the classroom Dunn & Dunn, 1978). Their so-called "Contract Activity Packages" are educational plans that use: i) a clear statement of the learning need; ii) multisensory resources (auditory, visual, tactile, kinesthetic); iii) activities through which the newly mastered information can be used creatively; iv) the sharing of creative projects within small groups; v) at least three small-group techniques; and vi) a pre-test, a self-test, and a post-test. Dunn & Dunn (1978).

2.2.4 The Teacher's Teaching Behavior

The development of the learning behavior gets the cooperation of both teachers and learners in developing the ideal behavior of learning. There is a proponent of psychologist and educator that mentioned the development of teaching behavior to let the learners attain the curriculum objectives. Khampirapakorn (1983) contended that a major element that influences the learning behavior of the students is the teacher's teaching behavior. The teaching behavior concerns directly the development of the learning behavior of the students because students hold on to teachers to be their model. Teachers must understand that one part of the behavior that

students express from the teacher's teaching also is the element of readiness of the learners, which refers to maturity of the learners. Based on the primary knowledge of the learners or any others that concern with the learners, the element of the environment plays important role also such as the place of teaching, learning materials, and classmates.

Noysengsry (1975) presented the method of learning on how to become successful. The learning must use the "attempt model". This means that one has to be sensitive with the child's rights, maintain one's health, good sanitation, keep interest in the subject, read often, practices judgment in the exploration, pose a question, read seriously, learn words by heart, repeat an review lessons. These will make learners remember more the contents. They must train to collect vocabulary, use the language as efficiently, try to note down, and always test oneself.

2.2.5 The Learning Techniques

Smith (1970) suggested that the method to organize the system of learning is to put more efficiency by specifying the time table and force oneself to act on it, arrange the place for work as appropriate, set the meditation to be determined without anything that bothers and work for assignment in each day. Added to this, one has to improve reading and understanding contents of story or review the same messages in a given time. One must understand the contents of the theme, and has to underscore or emphasize the important points to remember or be clearly seen. Noting down the important part that had been read or listened will also help.

Walter & Siebert (1976) said a technique that simplifies learning is like this: Make a time table that is efficient but must be reasonable as possible to put into practice. One should set up a period of time with no disturbance for the subject that has difficult content for further understanding. The timetable can help the learner prepare for study or do other activity which is enthusiastic. The learner must attempt to expel the things that come to disturb the concentration while studying. The eyes and ears must concentrate while studying. Noting down the lecture into the notebook will protect to forget and still help the listener better. The paper that is used to note should be a big paper but one should not note too much. The subject must be in the same

page. There must be a date that controls on the lecture and notes into sentence or in phrases. One should not note down word by word as it is time consuming.

From the above discussions it can be inferred that the elements that influence the development of an ideal learning behavior of students rest on the teachers' teaching behavior, the readiness of the learners and the environment, and the techniques of the learning that is efficient. The learners should have the timetable for studying, must review the lessons always, complete the assignments, and if the lessons are not understood, one must ask, and then note down briefly for oneself. These methods of learning that has been mentioned when integrated with techniques, the specific methods for each person will help the learners become successful.

2.2.6. Assessment of Students' Learning

In classrooms where assessment for learning is practiced, students are encouraged to be more active in their learning and associated assessment. The ultimate purpose of assessment for learning is to create self-regulated learners who can leave school, cable and confident to continue learning throughout their lives. Teachers need to know at the outset of a unit of study where their students are in terms of their learning and then continually check on how they are progressing through strengthening the feedback they get from their learners. Students are guided on what they are expected to learn and what quality work looks like. The teacher will work with the student to understand and identify any gaps or misconceptions (initial/diagnostic assessment). As the unit progresses, the teacher and student work together to assess the student's knowledge, what she or he needs to learn to improve and extend this knowledge, and how the student can best get to that point (formative assessment). Assessment for learning occurs at all stages of the learning process.

2.3 Concept of Learning Achievement

2.3.1. Definition of Learning Achievement

Wangpanich (1983) defined learning achievement as the characteristics and abilities of the individual derived from teaching and learning. It was change of behavior and experience. The learning is derived from the training or teaching which relates with the memory, understanding, analysis, application, synthesis, and evaluation. Cheuachanh (1993) defined learning achievement as the knowledge and understanding successfully acquired through learning which can be shown by the test scores.

Eysenck, Arnold & Meili (1972) stated that learning achievement depend on physical and intellectual ability. Hence, the learning achievement is the size of what has been successfully gained from learning depending on personal ability of an individual. On the other hand, learning achievement may be observed from the process that does not depend on the test. This may be from mere external observation, checking of homework, etc. The ones acquired in the level scores in schools depend on a complex process and a long period of time or may be acquired from the test measurements of learning achievement in general. From this, learning achievement can therefore mean as knowledge, understanding, and successful gains of students acquired from teaching and learning, which can be measured.

2.3.2 Factors Concerned with Learning Achievement

Thiankhamsy (1998) found that the person who is successful in learning does not depend only on the intellectual factor. The non-intellectual factors also matter very much. Bloom (1976) studied the variable about the learning achievement and found that there were three (3) variables involved, namely: i) The behavior that concerns with knowledge means the various ability of the learners consisting of aptitude as basis of learners; ii) The behavior that concerns with feelings means the situation or motivation that makes the learners want to learn new knowledge. It is the interest and attitude to the content of subjects by the education system; and iii) Quality of teaching means the productivity that the learners will receive as the result of

learning. It is the participatory teaching and learning, the reinforcement from teacher in solving the error and knowing the feedback if performing is good or not.

Prescott (1961) also pointed out that the elements concerning with the learning achievement are: i) Elements of physical that are the growth rate of the body, health, and characteristic of the body; ii) Elements of love that is the relationship of parents and the relationship of family members; iii) Elements of culture and environment that are the livelihood of family members foster and family status; iv) Elements of relationship with group friends that is the relationship between friends of the same generations; v) Elements of self-development that are intellectual and of interest; and vi) Elements of an adjustment that is the problem of adjustment and expression.

2.3.3 Measurement and Evaluation of the Learning Achievement

According to Osman (2010) measurement is an essential component of the evaluation process. It is a critical part since resulting decisions are only as good as the data upon which the data are based. In general sense, data collection is involved in all phases of evaluation – the planning phase, the process phase and the product phase. Measurement, however, is the process of quantifying the degree to which someone or something possesses a given trait, normally occurs in the process and the product phase. Evaluation is an integral component of all systems of education at all processes. It is what enables educators, teaches, administrators, policy makers and the community have an idea of what is missing and what is available. Evaluation can be defined in two ways, depending on what we want to achieve at end of the exercise. Evaluation is the systematic process of collecting and analyzing data in order to determine whether, and to what degree objectives have or are being achieved. Evaluation is the systematic process of collecting and analyzing data in order to make decisions.

Manisod (2013) likewise defined measurement and evaluation as a process to determine the number or symbol of quantity or quality of characteristic or properties of the things that need to be measured. In the measurement of learning, the things measured the result gained from the learning of students. Evaluation is the continuous process of measurement. It is an assessment that decides the absolute criteria. For

instance, scores of 80 percentages up is decided to be in good level; scores of 60-79 percentages is decided that it is fairly good level; and scores less than 60 percentages is decided that it should be the level that needs improvement.

Wangpanich (1983) defined the measurement and evaluation as a tool to check the behavior of students' knowledge, ability or how successful they are with the objectives of teaching. In the process of teaching and learning, seeks to analyze the changes of students' behavior. Two types of abilities in meeting learning objectives are identified as follows: i)The measurement for the practice is the checking on the level of ability or skill of the learner to emphasize the learners expressed capability. Practical check reflects on accomplishment on arts education, physical education, and technical education. This measurement has to use the test paper for practice; and ii) Measurement of contents are the checking on the mastery of the contents of subjects as experienced in the learning of learners. This can be measured by using the test paper measurement of achievement.

2.4 Learning Achievement at Lower secondary school, in Vientiane Capital, Lao PDR

Learning achievement in Lao PDR is measurement by using the principle to give the score for students, Ministry of Education and Sport (2010) by the principle to give the score as follows: Score 1 meaningful received score 10%, Score 2 meaningful received score 20%, Score 3 meaningful received score 30%, Score 4 meaningful received score 40%, Score 5 meaningful received score 50%, Score 6 meaningful received score 60%, Score 7 meaningful received score 70%, Score 8 meaningful received score 80%, Score 9 meaningful received score 90%,and Score 10 meaningful received score 100%. It is determined that if received score of the examination 1-4 (10%-40%) will be repetition and received score 5-10 (50%-100%) will be promotion.

In the Vientiane Capital, lower secondary education level has not been totally successful as expected from the internal efficiency indicators of Secondary Education showed that the academic years 2009-2010, 2010-2011 and 2011-2012. In academic year 2009-2010, promotion rate for grade 1 is 89.4; grade 2 is 90.3; and

grade 3 is 91.4. Repetition rate for grade 1 is 3.0; grade 2 is 2.3; and grade 3 is 1.9. Dropout rate for grade 1 is 7.6; grade 2 is 7.4; and grade 3 is 6.7. In academic year 2010-2011, promotion rate for grade 1 is 89.3; grade 2 is 90.7; grade 3 is 91.4; and grade 4 is 92.6. Repetition rate for grade 1 is 2.6; grade 2 is 2.1; grade 3 is 2.1; and grade 4 is 0.7. Dropout rate for grade 1 is 8.1; grade 2 is 7.2; grade 3 is 3.8; and grade 4 is 6.7. In academic year 2011-2012, promotion rate for grade 1 is 90.7; grade 2 is 92.6; grade 3 is 95.5; and grade 4 is 91.9. Repetition rate for grade 1 is equal to 2.2; grade 2 is 2.0; grade 3 is 1.6; and grade 4 is 0.9. Dropout rate for grade 1 is equal to 7.1; grade 2 is 5.4; grade 3 is 2.9; and grade 4 is 7.2 (*Sources from: Department of planning, Ministry of Education and Sport*).

2.5 Related Research on Student's Learning Behavior and Learning Achievement

Promsiri (1992) studied the learning styles of Kasetsart University students and compared learning styles by class level, fields of study and academic achievement. One thousand Kasetsart University students were randomly selected to respond to the student learning styles questionnaire developed by Grasha and Reichmann. The data for the study was analyzed by using percentage and Chi-square test. The result showed that Kasetsart University students favored the collaborative learning style at high level, participant learning style at middle level and the independent learning style at low level. Comparisons of students' learning styles, class level, fields of study, and academic achievement indicated that the students' learning styles were not statistically significant associated with class level and field of study at .05 and.01 respectively. The academic achievement of students were highly significant associated with the learning styles at .01 level. Students who were ranked as a high achiever, middle achiever, and low achiever favored the collaborative learning style at high level and the participant learning style at middle level. High achiever and middle achiever favored the independent learning style at low level. Low achiever favored the competitive, and independent learning styles at low level.

Thiankhamsy (1998) conducted the relationship between learning behavior and achievement in learning arts and life of Matayon Suksa two students, General

Education Department's School,Saraburi. The purpose of this research was to study the relationship between learning behavior and the achievement in learning arst and life by Matayom Suksa two students. The subjects were 400 Matayom Suksa two students under the responsibility of the general education department's schools, in Sraburi province. The randomized control group pretest-posttest design was used with response being analyzed using multi-stage statistics. The learning behavior test (reliability 0.8915) was used in this study and the data were analyzed by mean standard deviation tests and Pearson's Product-Moment Correlation Coefficient. The results of this study indicated that: i) learning behavior and achievement in learning art and life by Matayom Suksa two students were positively related with significance level of .05 (Coefficient.2392); ii) the boys' learning behavior and achievement in learning art and life were positively related with significance level of .05 (coefficient.2273); and iii) the girls' learning behavior and achievement in learning art and life were positively related with a significance level of .05 (coefficient.2487).

Theeraroungchaisri (1999) also studied the learning styles, learning behavior of learning in virtual campus and learning achievement of graduate students. The objectives of this research was to study the relationship among learning styles and learning behaviors of learning in virtual campus upon learning achievement of graduate students. The subjects were 24 graduated students of Faculty of Education, Chulalongkorn University and 20 graduated students of Faculty of Education, Chiengmai University. Grasha and Reichmann Learning Style Pattern Test was used to identify learning styles of the subjects. In virtual campus, there were classroom, library, webboard, chat room, theater, newspaper, and teacher room. Data were analyzed by one-way and two-ways ANOVA, the Pearson's Product Moment Correlation Coefficient, and regression analysis. The findings could be summarized as follows: i) learning styles was not found significantly affecting on learning achievement, but did have interactive effect on frequency of viewing the web that was not related to learning process on learning achievement; ii) the frequency of viewing the web that related to learning process in the virtual campus was statistically significant when related to learning achievement; iii) frequency of user logon, length of time user spent in the virtual campus, and frequency of viewing the web that related to learning process were found to be correlated.

Mohd Roslan (2001) conducted a study about the influence of students' learning styles on academic achievements. The main purpose of the study was to examine the influence of students' learning styles on academic achievements. The objectives of the study were: 1) to determine the level of academic achievements (CGPA) among undergraduate students of University Utara, Malaysia and 2) to examine the relationship between learning styles on academic achievements among undergraduate students of University Utara, Malaysia. In order to measure the learning styles, six dimension from Grasha-Reichmann Student learning style scales (GRSLSS) namely independent, dependent, collaborative, competitive, contributive and avoidant were used. A total of 55 responses were collected through questionnaire based survey method representing a total of 92 percent response rate. The process of analyzing the data was done by using SPSS software version 12.00 for descriptive, Pearson correlation and multiple regression technique. Throughout the statistical analysis, it was found that there is a positive and significant relationship between the six independent variables namely independent, dependent, collaborative, competitive, contributive and avoidant on the dependent variable - student's CGPA. The overall findings of the study also indicate that among six independent variable that have been tested, collaborative was the dominant factor that influence on academic achievements among undergraduate students of University Utara, Malaysia. The findings were discussed and recommendation for future research and practitioners were also addressed.

Trelertpojkul (2002) studied the Effects of Variables on Mathematics Achievement of Mathayom Suksa I Students in Ubon Rachathani Province. The objective of the study was to understand the Effects of Variables on Mathematics Achievement of Mathayom Suksa 1 students. With 479 sample students, data analysis was done by SPSS for Windows. The analysis is the relationship between variables using Pearson Product Moment Correlation. The result of the study indicated that the learning aptitude side of language, the learning aptitude side of number, the learning aptitude side of the reason, attitude to Mathematics and learning behavior of Mathematics were positively related with the learning Mathematics achievement of Mathayom Suksa 1 students. It showed further that the Variance of the learning Mathematics achievement of Mathayom Suksa 1 students equal 40.3%.

RuckMai (2006) on the other hand studied the relationship between the study behaviors and the achievement of student's learning (Case study of the subjects of business forecasting and research methods in Dusit Thani College). The objective of the study was to understand the relationship between the study behaviors and the achievement of students' learning by collecting data from students that study the subjects of business forecasting and research methods in the first term of academic year 2006. By random sampling method, the number of sample is 110 students using questionnaires as instruments in the collection data. Analysis of data was done by SPSS for Windows. By using descriptive statistics and Inference Statistics analysis, the relationship between the variables by Correlation Coefficient was established. The result of the study indicated that learning behavior and learning achievement were positively related with a significance level at 0.05 (Coefficient r=0.305).

Chantarakeeree (2007) also studied the Relationship between learning styles and academic achievement of graduate students, Faculty of Education, Prince of Songkla University. This research was conducted to examine: 1) learning styles of graduate students at Prince of Songkla University; 2) relationship between learning styles and academic achievement of graduate students at Prince of Songkla University; 3) academic achievement of graduate students in comparison to different learning styles; and 4) learning styles of graduate students from different years. The research populations for data collection were 312 first-year and second-year M.Ed. graduate students of the academic years 2004 and 2005 at Prince of Songkla University. Learning style survey form was created following Grasha and Reichmann pattern in order to measure 6 learning styles of the samples including competitive, collaborative, avoidance, participant, dependent and independent at a significance level of .836. The research discovered that: 1. The graduate students of Education Faculty at Prince of Songkla University mostly used collaborative than participant and less in avoidance learning styles. 2. Collaborative and participant learning styles were related to academic achievement of the graduate students of Education Faculty at Prince of Songkla University at a significance level of .01. 3. The graduate students of Education Faculty at Prince of Songkla University with dissimilar learning styles revealed different academic achievement. 4. The graduate students of Education

Faculty at Prince of Songkla University from different years demonstrated no academic achievement difference.

Ta – Ngam Wilailuk et al (2007) also studied the learning styles affecting learning achievement of students on Rajamangala University of Technology Phra Nakhon. The sample consisted of 257 the fourth year students of the faculty of Liberal Arts Mass Communication Technology Textile Industry and Fashion Design Home Economics Technology and Architecture and Design in the first semester of 2007 academic year, the instrument used for collecting data was the 5 rating scales – questionnaire on learning styles. The questionnaires consisted of 6 learning styles classified by Grasha and Reichmann: Independent, Dependent, Avoidance, Collaborative, Participant and Competitive, consisted of 60 items. The reliability was 0.85. The data were analyzed by using the computer program "SPSS for window". The statistics analysis includes α - coefficients, percentage, mean, and standard deviation. The results were as follows: i) Most students occupied collaborative and participant learning styles, then independent, dependent, avoidance and competitive respectively; ii) The competitive and collaborative affecting learning achievement were significantly different at P<05. The competitive learning style has the negative effect towards learning achievement; and iii) The Collaborative learning style has the positive effect towards learning achievement. The equation used for predicting learning achievement is: $Y = 2.697 – 0.118\ X6 + 0.158\ X5$.

Bahar (2009) studied the relationship between pupils' learning styles and their performance in mini science project. This study aimed to investigate: i) the relationship between pupils' learning styles and their performance in mini science project and ii) the degree of enjoyment of pupils with different learning styles towards mini projects. A total of 80 pupils (7^{th} grade-14 years of age) from two different primary schools participated in the study. The Grasha-Reichmann Learning styles scale was used to determine the pupils' learning styles. Results showed that all categories of pupils except avoidant were stimulated to varying degrees by the mini projects. However, the pupils who were in the "independent," "Competitive," and "participant" groups had relatively higher achievement scores in the mini project than the pupils in the "avoidant," "dependent," and "collaborative" groups.

Daoroj (2009) studied the learning styles of nursing students in Boromarajonani College of Nursing, Yala. divided by religion, year of study and learning achievement. The sample consisted of 198 nursing students. The rating scale questionnaire consisted of 6 learning styles classified by Grasha and Reichmann (1982): independence, dependence, avoidance, collaborating, participating and competition. The internal reliability of the test was .79. Statistical techniques used in data analysis were percentage, mean, standard deviation and and One-Way ANOVA. The results were as follows: i) Most nursing students occupied participant learning styles, then collaborating, independence, competition, avoidance and dependence style, respectively; ii) The competitive learning style was significant ($p< .05$) between Buddhism and Islam nursing students; iii) Nursing students who were different year of study had significantly different learning styles which were 4 learning patterns: independence, collaborating, dependence and participating respectively.

Douangnate (2009) conducted a study on the three (3) factors of meeting the objectives of learning the Academic Achievement of Intermediate Accounting II of Sophomore Students of The Faculty of Accounting, Sripatum University (Bangkhen). These factors are: i) Family Factors focusing on the Parents' Level of Education; ii) Student's Economic Status; iii) the good study habit as well as the motivation in studying Intermediate Accounting II. The data were collected to 281 sophomore students with questionnaires that were divided into 4 and 5 levels before being analyzed by SPSS for Windows Program to find out the frequency, percentage, average, standard deviation, one-way variation analysis, F-test, and Pearson's Product Moment Correlation Coefficient. The result was that the achievement of the students were different with the parents' level of education. That is, if it was bachelor or higher level, the achievement of studying will be in a better direction. But the achievement of students was not related with the factor of Student's Economic Status. According to the study the good study habit and motivation to achieve have positive effect to a better achievement.

International Journal of Academic Research in Progressive Education and Development (2013) had conducted also a study on "The Learning Styles and Academic Achievements among Arts and Science Streams Student". The main objectives of the study are as follows:1) to seek if students' academic achievement has

any significant relationship with their learning styles; 2) to determine the types of learning styles that have significant relationship with students' academic achievement in both the arts and science streams; and 3) to determine the demographic factors that have significant relationship to the learning styles among Form 4 and 5 students of both the Arts and Science streams in one of the schools in the northern part of West Malaysia. To measure learning styles, six dimensions from the GRLSS (Grasha-Reichmann Learning Styles Scale) are used. The free style, avoidance, cooperation, dependent, competition, and participation are used as the factors. A total of 100 responses were collected through the questionnaires distributed and received one at random which represented 100% response. The data analysis done using SPSS v.19. The data was analyzed and interpreted using descriptive and inferential statistics. Findings from the data analysis show that respondents prefer the dependent learning style followed by cooperation in all the variables namely genders, class, ethnic, family income and students' academic achievement. However, there can be a bit of difference in terms of students who come from the home income of RM 2000, where they prefer cooperation followed by dependency. The Pearson Correlation analysis showed no significant relationship between learning styles as a whole with academic achievements, except for avoidance. The main findings also showed no significant relationship between learning styles and academic achievements.

CHAPTER III
RESEARCH METHODOLOGY

This study examined the level of the learning achievement, level of students' learning behavior, influence of student's behavior on learning achievement, of lower secondary school students in Vientiane Capital, Lao PDR, to take the result of the research to use as data for parents or guardians of students, students, teachers, education administrators, related in the education for use to plan to improve in management of teaching and learning in the future. The content were organised in the following sequence:

1.1 Research Design
1.2 Population and Sample
3.3 Research Instruments
3.4 Quality of Research Instruments
3.5 Data Collection
3.6 Research Statistics

3.1 Research Design

This study was carried out by using the descriptive survey. Research questions were answered through the analysis of the data collected by using survey questionnaires, which provides the breadth of coverage. The closed-ended survey questionnaire is also easier and more convenient for participants to answer.

3.2 Population and Sample

This research determined the population and sample as follows:

3.2.1 Population

The population of this research was 11,184 students of lower secondary school level in grade 4, first term of academic year 2013-2014 in Vientiane Capital, Lao PDR. *(Planning Department, Ministry of Education and Sports 2013)*

3.2.2 Sample size

The sample size was calculated by using Yamane formula (1969) with 95% confidence level and e=0.05

$$n = \frac{N}{1 + N(e)^2}$$

When n = size of Sample

N = size of Population

e = Percent of residual sampling

Population has 11,184 students, acceptance the residual sampling

e = 0.05, which calculating follow:

$$n = \frac{N}{1 + N(0.05)^2}$$

$$n = \frac{11,184}{1+11,184(0.05)^2}$$

$$= 386.18 \approx 386 \text{ students}$$

The researcher added up 20% of the minimum size of sample obtained. Thus, the sample size could be 463 students.

3.2.3 Sampling method

Step1. Stratified Sampling by divided Vientiane Capital into 2 groups such as: Urban area district: Chanthabury district, Sikottabong district, Saysettha district, Sisattanak district and Hatsayfong district. Rural area district: Nasaythong district, Saythany district, Sangthong district and PakNgeum district, then simple random sampling by drawing lottery get 2 districts from Urban area district that is

Chanthabury district and Sisattanak district and get 2 districts from Rural area district that is Saythany district and Sangthong district. The calculation number of sample for each district by step1 showed by table 3.1 as follows:

Table 3.1 The distribution of the sizes sample for the districts selected

Item	Urban area		Rural area		Total
	Chanthabury district	Sisattanak district	Saythany district	Sangthong district	
Number of student	1,675	854	2,846	323	5,698
Number of sample size	$= 463 \times \frac{1,675}{5,698}$ $= 136$	$= 463 \times \frac{854}{5,698}$ $= 70$	$= 463 \times \frac{2,846}{5,698}$ $= 231$	$= 463 \times \frac{323}{5,698}$ $= 26$	463
Number of respondent	136	70	231	26	463

Step2 Simple random sampling by drawing lottery get 2 schools from Chanthabury district that is Vientiane complete secondary school and Phonetong lower secondary school, get 2 schools from Sisattanak district that is Phiawat complete secondary school and Chomphet lower secondary school, get 2 schools from Saythany district that is Tanemixay complete secondary school and Sivilay lower secondary school, get 2 schools from Sangthong district that is Namsang complete secondary school and Sangsay lower secondary school, for selecting sample of students in each school use systematic random sampling. The calculation number of sample for each school by step2 showed by table 3.2 as follows:

Table 3.2 The distribution of the sizes sample for the schools selected

Schools	Number of Student	Number of sample	Number of respondent
1. Vientiane complete secondary school	302	$= 136 \times \frac{302}{437} = 94$	94
2. Phonetong lower secondary school	135	$= 136 \times \frac{135}{437} = 42$	42
Total 1	**437**	**136**	**136**
3. Phiawat complete secondary school	172	$= 70 \times \frac{172}{276} = 44$	44
4. Chomphet lower secondary school	104	$= 70 \times \frac{104}{276} = 26$	26
Total 2	**276**	**70**	**70**
5. Tanemixay complete secondary school	227	$= 231 \times \frac{227}{299} = 175$	175
6. Sivilay lower secondary school	72	$= 231 \times \frac{72}{299} = 56$	56
Total 3	**299**	**231**	**231**
7. Namsang complete secondary school	57	$= 26 \times \frac{57}{95} = 16$	16
8. Sangsay lower secondary school	38	$= 26 \times \frac{38}{95} = 10$	10
Total 4	**95**	**26**	**26**
Total	**1,107**	**463**	**463**

3.3 Research Instruments

The research instruments consist of 4 parts as follows:

Part 1: General information of students comprise of 3 questions such as: genders, age and average scores every subject the first term examination of the academic year 2013-2014. For criteria in the measurement the level of learning achievement was imitated the principle to give the score for students as follows:

Table 3.3 Scores and Interpreting level of scores

Scores	Level
9-10	Excellent
7-8	Good
5-6	Fairly
3-4	Poor
1-2	very Poor

Note: Ministry of Education and Sport (2010)

Part 2: The Family Status of Students comprise of 5 questions such as: the number of students have relatives together with parents, high level of father education, high level of mother education, occupation of student's father and occupation of student's mother.

Part 3: Economic family status of students comprise of 2 questions such as: averages monthly incomes of student's family and student's expenditure per day.

Part 4: Student's learning behavior based on the learning style of Grasha & Reichmann (1996) that consist of 6 dimensions: independent style, avoidant style, collaborative style, dependent style, competitive style and participative style. It has 30 questions which each learning styles have 5 items.

Table 3.4 Student's learning behavior classified by six styles

	Learning styles	No of Item	Item number
1)	Independent Style	5	1, 7, 13, 19, 25,
2)	Avoidant Style	5	2, 8, 14, 20, 26,
3)	Collaborative Style	5	3, 9, 15, 21, 27,
4)	Dependent Style	5	4, 10, 16, 22, 28,
5)	Competitive Style	5	5, 11, 17, 23, 29,
6)	Participative Style	5	6, 12, 18, 24, 30,
	Total	**30**	

The questionnaire use the five point Likert scales (Likert,1932), which determined value by student's learning behavior as follows:

Table 3.5 Measurement level of Likert scale

Scores	Likert scales (Level)
5	Most frequently
4	Frequently
3	Sometimes
2	Rarely
1	Never

The mean score was calculated using the evaluation criteria of Best (1981) and was classified into five levels shown as follows:

$$\frac{Highest\ score - Lowest\ score}{Number\ of\ level}$$

$$\frac{5-1}{5} = \frac{4}{5} = 0.8$$

Table 3.6 Level of Student's Learning Behavior

Mean scores	Level
4.21-5.00	Highest
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Lowest

3.4 Quality of Research Instruments

3.4.1 Validity

Researcher checked the completeness of the study instrument, the clarity of language, and the relevance of the issues with the thesis advisor and 2 truly experts from Ministry of Education and Sport Lao PDR as shown in the appendix B.

3.4.2 Reliability

The researcher brought the data that had been collected from 30 questionnaires for analysis to find the reliability of questionnaires by analysis of Cronbach's Alpha Coefficient method (1963). It had the result of reliability of student's learning behavior as shown in the table 3.7:

Table 3.7 Cronbach's Alpha Reliability

Learning Behavior	Cronbach's Alpha Coefficient
Independent Style	0.727
Avoidant Style	0.686
Collaborative Style	0.789
Dependent Style	0.639
Competitive Style	0.722
Participative Style	0.790
Total	**0.887**

From table 3.7 found that Cronbach's Alpha Coefficient of all items of learning style equal 0.887 was rather high that it shown the respondent of questionnaire that used to try out had comment accordance, so the questionnaire was appropriate to use in the research.

3.5 Data Collection

The researcher had been processed collecting data by 2 steps as follows:

3.5.1 Contact and ask for permission letter from Graduate studies, Mahidol University to the director of 8 schools to ask for cooperates in collecting data.

3.5.2. Brought the questionnaires to student's at grade 4 in 8 schools for Answer the questionnaires by the explanation to students be the sample to know the objectives and ask for cooperate in answering the questionnaires. In this analysis, the researcher collected the example data by oneself, at the begin from date 18 month 1 year 2014 use the time in collecting 30 days.

3.6 Statistics and Data Analysis

After the researcher completed collecting the dully-filled questionnaires, the data was then tabulated in the program "Package Program for Windows'. The data entered was analyzed using the following statistics:

3.6.1 To analyze the respondents' general information, family status and economic family by using descriptive statistic, such as mean, standard deviation (S.D.) and percentage (%).

3.6.2 To analyze the level of learning behavior by using descriptive statistic, such as mean, standard deviation (S.D.).

3.6.3 To analyze the influence of student's learning behavior on learning achievement of lower secondary school students in Vientiane Capital, Lao PDR. By using Stepwise Multiple Regressions Analysis.

CHAPTER IV
RESULT OF THE STUDY

In this chapter, the researcher presents the result of the research conducted on student's learning behavior on learning achievement of lower secondary school students in Vientiane Capital, Lao PDR". In the process of conducting the research, the researcher collected the data by means of questionnaires. The respondent rate was 100 percent, with 463 respondents, which was the total sample strength of the study. After the collection of data, the data was analyzed with the package program and the research findings are presented in the following sequence:

4.1 General information of respondents

4.2 The level of learning achievement of lower secondary school students in Vientiane Capital, Lao PDR

4.3 The level of student's learning behavior of lower secondary school students in Vientiane Capital, Lao PDR

4.4 The influence of student's learning behavior on learning achievement of lower secondary school students in Vientiane Capital, Lao PDR.

4.1 General Information of Respondents

Table 4.1 General information of students at grade 4, lower secondary school level, in Vientiane, Lao PDR

(n=463)

	General information of students	Number	Percentage
Gender			
	Male	192	41.5
	Female	271	58.5
	Total	463	100.0
Age			
	12 -13 years	51	11.0
	14 -15 years	345	74.5
	16 and above	67	14.5
	Total	463	100.0

From table 4.1 Found that students at grade 4, lower secondary school in Vientiane, Lao PDR that was most of students were female calculated by number equal to 271 calculated by percentage equal to 58.5 and male calculated by number equal to 192 calculated by percentage equal to 41.5

When consider from the ages found that students at grade 4, lower secondary school in Vientiane, Lao PDR that the sample groups in this research most of students were age 14-15 years, calculated by percentage equal to 74.5

Table 4.2Family status of students at grade4, lower secondary school level, in Vientiane, Lao PDR

(n=463)

Family Status of Students	Number	Percentage
Number of relatives together with parents		
Don't have relative	34	7.3
1-2 persons	214	46.2
3 and above	215	46.4
Total	463	100.0
High level of father education		
Below Bachelor's degree	335	72.3
Bachelor's degree	74	16.0
Upper Bachelor's degree	54	11.7
Total	463	100.0
High level of mother education		
Below Bachelor's degree	405	87.5
Bachelor's degree	37	8.0
Upper Bachelor's degree	21	4.5
Total	463	100.0

Table 4.2Family status of students at grade 4, lower secondary school level, in Vientiane, Lao PDR (Cont)

(n=463)

Family Status ofStudents	Number	Percentage
Occupation of student's father		
Government officer	133	28.7
State enterprise	18	3.9
Private Company	41	8.9
Agriculture	20	4.3
Employee	75	16.2
commerce / Personal Profession	130	28.1
Others	46	9.9
Total	463	100.0
Occupation of student's mother		
Government officer	76	16.4
State enterprise	16	3.5
Private Company	28	6.0
Agriculture	28	6.0
Employee	34	7.3
commerce / Personal Profession	209	45.1
Others	72	15.6
Total	463	100.0

From table 4.2 found that students at grade4, lower secondary school in Vientiane, Lao PDR that was the sample groups in this research has total number 463 students, most of students have number relatives together with parents 3 and above persons, calculated by the number equal to 215 persons, calculated by percentage equal 46.4

When considered from high level of father education found that students at grade4, lower secondary school in Vientiane, Lao PDR that was the sample groups in this research. Most of father had level of education was below Bachelor's degree, calculated by the number equal 335 persons, calculated by percentage equal 72.3

When considered from high level of mother education found that students at grade 4, lower secondary school in Vientiane, Lao PDR that was the sample groups in this research. Most of mother had level of education was below Bachelor's degree, calculated by the number equal 405 persons, calculated by percentage equal 87.5

When considered from the occupation of student's father found that students at grade4, lower secondary school in Vientiane, Lao PDR that was the sample groups in this research. Most of the father's occupation was occupation of government officer, calculated by the number was 133 persons, calculated by the percentages equal 28.7

When considered from the occupation of student's mother found that students at grade4, lower secondary school in Vientiane, Lao PDR that was the sample groups in this research. Most of the mother's occupation was commerce / Personal Profession, calculated by number equal 209 persons, calculated by percentage equal45.1

Table 4.3 Economic family status of students at grade4, lower secondary school level, in Vientiane, Lao PDR

(n=463)

Economic family status of students	Number	Percentage
Averages monthly incomes of student's family		
Not more than 2,000,000 Kips	174	37.6
2,000,001-3,000,000 Kips	114	24.6
3,000,001-4,000,000 Kips	81	17.5
4,000,001-5,000,000 Kips	31	6.7
5,000,001-6,000,000 Kips	24	5.2
6,000,001 Kips and above	39	8.4
Total	463	100.0
Student's expenditure per day		
Not more than 10,000 Kips	264	57.0
10,001-20,000 Kips	99	21.4
20,001-30,000 Kips	71	15.3
30,001-40,000 Kips	11	2.4
40,001-50,000 Kips	12	2.6
50,001 Kips and above	6	1.3
Total	463	100.0

From table 4.3 found that students at grade4, lower secondary school in Vientiane, Lao PDR that was the sample groups in this research has total number 463 students, most of the averages monthly incomes of student's family have not more than 2,000,000 kips, calculated by the number was 174 students, calculated by percentage equal 37.6

When considered from student's expenditure per day found that students at grade4, lower secondary school in Vientiane, Lao PDR that was the sample groups in this research has total number 463 students, most of student's expenditure per day was not more than 10,000 kips, calculated by the number was 264 students, calculated by percentage57.0

4.2 The Level of Learning Achievement of Lower Secondary School students in Vientiane Capital, Lao PDR

Table 4.4 Learning Achievement of students at grade 4, Lower secondary school, in Vientiane, Lao PDR

(n=463)

Learning achievement	Number	Percentage	Level
Score of students every genders			
9-10	44	9.5	Excellent
7-8	228	49.2	Good
5-6	175	37.8	Fairly
3-4	15	3.3	Poor
1-2	1	0.2	Very Poor
Total	**463**	**100.0**	

Note:Excellent=9-10, Good=7-8, Fairly=5-6, Poor=3-4 and very Poor=1-2

From the score found that students at grade4, lower secondary school in Vientiane, Lao PDR that the sample groups in this research most of student has level of learning achievement is good by scores were 7-8, calculated by the number equal 228 students calculated by percentage equal 49.2

4.3 The Level of Student's Learning Behavior of Lower Secondary School students in Vientiane Capital, Lao PDR

Table 4.5 Learning behavior in the independent style aspect of students at grade 4, lower secondary school, in Vientiane, Lao PDR

(n=463)

No	Learning behavior	$\bar{X}$	S.D	Level of behavior
1.	I would like to make my own decision of what subject matter I should learn.	4.00	0.966	High
2.	I feel confident to learn by myself	3.77	0.993	High
3.	I search for more information on the interesting issues by my own.	3.85	0.987	High
4.	I like to do assignments and projects alone.	2.99	1.157	Moderate
5.	When I do not understand something, I will try to clarify by my own first.	4.01	0.957	High
	Average	**3.72**	**0.624**	**High**

Note:1.00-1.80=lowest, 1.81-2.60=low, 2.61-3.40=moderate, 3.41-4.20=high, 4.21-5.00=highest

From table 4.5 found that level of behavior of students by the Independent learning style. Most was in the high level. The item "When I do not understand something, I will try to clarify by my own first" was in the highest mean score of 4.01, while the item "I like to do assignments and projects alone" was at a Moderate level with the lowest mean score of 2.99. When considered from summary all items of learning behavior in the independent learning style found that it was high level that has mean equal 3.72.

Table 4.6 Learning behavior in the Avoidant style aspect of students at grade 4, lower secondary school, in Vientiane, Lao PDR

(n=463)

No	Learning behavior	$\bar{X}$	S.D	Level of behavior
1.	I quit attempting to learn in the classroom.	3.43	1.249	High
2.	I study just to complete the program.	3.08	1.468	Moderate
3.	I am not quite excited for what I have learnt in the classroom.	3.03	1.260	Moderate
4.	I am very happy when my professor cancels class.	4.05	1.202	High
5.	I always chat in the classroom with the friends who sit next to me.	3.37	1.311	Moderate
	Average	**3.39**	**0.864**	**Moderate**

Note:1.00-1.80=lowest, 1.81-2.60=low, 2.61-3.40=moderate, 3.41-4.20=high, 4.21-5.00=highest

From table 4.6 found that level of behavior of students by the Avoidant learning style. Most was in the Moderate level. The item “I am very happy when my professor cancels class” was in the highest mean score of 4.05, while the item “I am not quite excited for what I have learnt in the classroom” was at a moderate level with the lowest mean score of 3.03. When considered from summary all items of learning behavior in the avoidant learning style found that it was moderate level that has mean equal 3.39.

Table 4.7 Learning behavior in the Collaborative style aspect of students at grade 4, lower secondary school, in Vientiane, Lao PDR

(n=463)

No	Learning behavior	$\bar{X}$	S.D	Level of behavior
1.	I feel like a team in the classroom which everyone helps each others.	4.36	0.838	Highest
2.	The most important thing of studying in university is to learn how to adjust with others.	4.33	0.786	Highest
3.	I believe learning is a contribution between students and professors.	4.14	1.070	High
4.	I am willing to help my friends whatever they do not quite understand.	4.08	1.016	High
5.	I like to participate in group activities in the classroom.	4.05	1.059	High
	Average	**4.19**	**0.724**	**High**

Note:1.00-1.80=lowest, 1.81-2.60=low, 2.61-3.40=moderate, 3.41-4.20=high, 4.21-5.00=highest

From table 4.7 found that level of behavior of students by the Collaborative learning style. All items were in the high level to the highest level. The item “I feel like a team in the classroom which everyone helps each others” was at a highest level with the highest mean score of 4.36, while the item “I like to participate in group activities in the classroom” was at a high level with the lowest mean score of 4.05. When considered from summary all items of learning behavior in the collaborative learning style found that it was high level that has mean equal 4.19.

Table 4.8 Learning behavior in the Dependent style aspect of students at grade 4, lower secondary school, in Vientiane, Lao PDR

(n=463)

No	Learning behavior	$\bar{X}$	S.D	Level of behavior
1.	Students should be taken care and guided closely by professor.	4.17	0.873	High
2.	I note whatever the professors lecture.	3.94	1.035	High
3.	I like to learn in a well-organized classroom.	4.33	0.842	Highest
4.	Students should be informed clearly about the subjects taught by professor.	4.15	0.912	High
5.	I have done the assignment step by step, follow the professor's instruction	4.14	0.891	High
	Average	**4.14**	**0.572**	**High**

Note:1.00-1.80=lowest, 1.81-2.60=low, 2.61-3.40=moderate, 3.41-4.20=high, 4.21-5.00=highest

From table 4.8 found that level of behavior of students by the Dependent learning style. All items were in the high level to the highest level. The item "I like to learn in a well-organized classroom" was at a highest level with the highest mean score of 4.33, while the item "I note whatever the professors lecture" was at a high level with the lowest mean score of 3.94. When considered from summary all items of learning behavior in the Dependent learning style found that it was high level that has mean equal 4.14.

.Table 4.9 Learning behavior in the Competitive style aspect of students at grade 4, lower secondary school, in Vientiane, Lao PDR

(n=463)

No	Learning behavior	$\bar{X}$	S.D	Level of behavior
1.	I like to compete with others.	2.15	1.040	Low
2.	Being a good student in the classroom is very important to me.	4.21	0.882	Highest
3.	I try to do my assignment better or faster than others.	2.12	0.888	Low
4.	I would like to know how well my friends do their assignment.	3.70	1.033	High
5.	I would like my professor to appreciate more on my work.	3.87	1.058	High
	Average	**3.21**	**0.427**	**Moderate**

Note:1.00-1.80=lowest, 1.81-2.60=low, 2.61-3.40=moderate, 3.41-4.20=high, 4.21-5.00=highest

From table 4.9 found that level of behavior of students by the Competitive learning style. All items were in the low level to the highest level. The item “Being a good student in the classroom is very important to me” was at a highest level with the highest mean score of 4.21, while the item “I try to do my assignment better or faster than others” was at a low level with the mean score of 2.12. When considered from summary all items of learning behavior in the Competitive learning style found that it was moderate level that has mean equal 3.21.

Table 4.10 Learning behavior in the Participative style aspect of students at grade 4, lower secondary school, in Vientiane, Lao PDR

(n=463)

No	Learning behavior	$\bar{X}$	S.D	Level of behavior
1.	I try to participate in the classroom as much as I can.	4.25	0.855	Highest
2.	I am willing to complete all of the assignments whether they are interesting or not.	4.11	0.954	High
3.	I always complete my assignments in time.	3.57	0.977	High
4.	I have done all of the professor's assignment whether it is required to do or not.	3.87	0.976	High
5.	I always sit in the first row of the classroom.	3.53	1.365	High
	Average	**3.86**	**0.622**	**High**

Note:1.00-1.80=lowest, 1.81-2.60=low, 2.61-3.40=moderate, 3.41-4.20=high, 4.21-5.00=highest

From table 4.10 found that level of behavior of students by the Participative learning style. All items were in the high level to the highest level. The item "I try to participate in the classroom as much as I can" was at a highest level with the highest mean score of 4.25, while the item "I always sit in the first row of the classroom" was at a high level with the lowest mean score of 3.53. When considered from summary all items of learning behavior in the Participative learning style found that it was high level that has mean equal 3.86.

Table 4.11 Overall of Student's learning behavior of students at grade 4, lower secondary school, in Vientiane, Lao PDR

Student's learning behavior	$\bar{X}$	S.D	Level of behavior
Collaborative Style	4.19	0.724	High
Avoidant Style	3.39	0.864	Moderate
Independent Style	3.72	0.624	High
Dependent Style	4.14	0.572	High
Competitive Style	3.21	0.427	Moderate
Participative Style	3.86	0.622	High
Average	**3.75**	**0.373**	**High**

From table 4.11 found that data analysis overall of student's learning behavior of students at grade 4, lower secondary school in Vientiane, Lao PDR was the sample groups in this research has 463 students, found that students at grade 4, lower secondary school in Vientiane, Lao PDR had level of behavior by the learning style from moderate level to high level, which the Collaborative style, the Dependent style, Participative style, Independent style, had high level of behavior which had mean equal to: 4.19; 4.14; 3.86; 3.72 respectively. The Avoidant style and the Competitive style had moderate level of behavior, which had mean equal to: 3.39 and 3.21

Table 4.12 Number of student at grade 4, lower secondary school, in Vientiane Capital, Lao PDR that had learning behavior the most in each learning behavior

Student's learning behavior	Number	Percentage
Collaborative Style	172	37.1
Avoidant Style	7	1.5
Independent Style	18	3.9
Dependent Style	74	16.0
Competitive Style	36	7.8
Participative Style	33	7.1
Mixed styles	123	26.6
Total	**463**	**100**

From table 4.12, it was found that the majority of the students at grade 4 from lower secondary school, Vientiane have collaborative learning style (37.1%); followed by mixed learning style (26.6%) and dependent learning style (16.0%).

4.4 The Influence of Student's Learning Behavior on Learning Achievement of Lower Secondary School students, in Vientiane Capital, Lao PDR.

4.4.1Multicollinearityanalysis of dependent factors

The multicollinearity analysis was performed with Pearson product moment correlation statistics on the six independent variables to test assumptions of strength of relationship between the student's learning behavior and learning achievement of student variable. The tables 4.13 showed that multicollinearity between the variables were not a significant problem since all variable pairs has correlation coefficient less than 0.75, which means the independent variables affected on learning achievement of students. Therefore, multiple regression analysis was conducted on the six independent variables of student's learning behavior to generate the significant affective learning achievement of students.

The variables included in the study were X1, X2, X3, X4, X5,X6 related to student's learning behavior and variable Y related to learning achievement of students.

X1: Collaborative Style

X2: Avoidant Style

X3: Independent Style

X4: Dependent Style

X5: Competitive Style

X6: Participative Style

Table 4.13: Analysis of the multicollinearity between the independent variables

	x_1	x_2	x_3	x_4	x_5	x_6
x_1	1					
x_2	0.309 **	1				
x_3	0.174 **	-0.089	1			
x_4	0.057	-0.031	0.155 **	1		
x_5	0.263 **	-0.001	0.526 **	0.110 *	1	
x_6	0.304 **	0.053	0.494 **	0.237	0.634	1

* $p<0.05$, ** $p<0.01$

The table 4.13 showed that multicollinearity between the independent variables were not significant problem since all variable pairs has correlation coefficient less than 0.75 therefore, all the independent variables able to use in the multiple Regression Analysis. The result of the analysis was shown on the table 4.14 and 4.15.

Table 4.14 Shown the increase of Multiple Correlation Coefficient (R) and Coefficient of Determination (R^2) when increased the factors in each variables.

Variables	R	R^2	R^2 change	SE_{est}	F	P-value
Collaborative style (x_1)	0.572	0.327	0.327	1.023	223.988	0.000
$\begin{cases} Collaborative\ style(x_1) \\ Avoidant\ style(x_2) \end{cases}$	0.593	0.352	0.025	1.005	125.055	0.000
$\begin{cases} Collaborative\ style(x_1) \\ Avoidant\ style(x_2) \\ Independent\ style(x_3) \end{cases}$	0.604	0.365	0.012	0.996	87.793	0.000

Form table 4.14 found that the Collaborative learning style was the first variable that had influence to the learning achievement then it was Avoidant learning style, Independent learning style respectively had the value of Multiple Correlation Coefficient was 0.604, the significance level 0.01 and had the influence to learning achievement 36.5 percentages, had standard error of the estimate equal ± 0.996

Table 4.15 shown the value of Multiple regression Coefficient, value of Constant, Standard error of the estimate

Variables	b	β	t	P-value
Collaborative style (x_1)	0.188	0.546	13.634	0.000
Avoidant Style (x_2)	0.043	0.149	3.762	0.000
Independent Style(x_3)	-0.046	-0.114	-2.991	0.003
Value of Constant b_o=2.957; $SE_{est}=\pm 0.996$				

From table 4.15 will see that value of Regression Coefficient in the model of standard score of Collaborative learning style at the significance level 0.01 had value of Regression Coefficient in the model of standard scores $\beta = 0.546$ that shown Collaborative learning style had positive influence on learning achievement that explained student who learnt by Collaborative learning style more than will have high learning achievement vice versa student who learnt by Collaborative learning style less than will have low learning achievement. For the Avoidant learning style that was negative items had value of Regression Coefficient in the model of standard scores

$\beta = 0.149$ that shown when the value of the level of behavior was low score of learning achievement will high vice versa when score of the value of the level of behavior was high score of learning achievement will low that it shown Avoidant learning style had negative influence on learning achievement that explained student who learnt by Avoidant learning style more than will have low learning achievement vice versa student who learnt by Avoidant learning style less than will have high learning achievement. The Independent learning style had negative influence on learning achievement significance level 0.01 with the value of Regression Coefficient in the model of standard scores $\beta = -0.114$ that explained student who learnt by Independent learning style more than will have low learning achievement vice versa student who learnt by Independent learning style less than will have high learning achievement., with it had standard error of the estimate equal ± 0.996.

- The regression equation at raw data score is

$$\hat{y} = 2.957 + 0.188(Collaborative\ style) + 0.043(Avoidant\ style) - 0.046(Independent\ style)$$

- The regression equation at standard score is

$$\hat{z} = 0.546(Collaborative\ style) + 0.149(Avoidant\ style) - 0.114(Independent\ style)$$

CHAPTER V
DISCUSSION

The study was conducted on the students of Lower Secondary Schools in Vientiane Capital, Lao PDR. The research was designed to study the level of learning achievement, examine the level of learning behavior of the students and to explore the influence of learning behavior on learning achievement of the students. The data collection was done via questionnaire. The data collected were analyzed using the statistical tools such as: Frequency, Percentage, Mean, Standard deviation, Multiple Correlation analysis and multiple regression analysis. Based on the research objectives, the findings of this study were discussed and analyzed as follows:

5.1 The level of learning achievement of lower secondary school students in Vientiane Capital, Lao PDR.

5.2 The level of student's learning behavior of lower secondary school students in Vientiane Capital, Lao PDR.

5.3 The influence of student's learning behavior on learning achievement of lower secondary school students in Vientiane Capital, Lao PDR.

5.1 The Level of Learning Achievement of Lower Secondary School Students in Vientiane Capital, Lao PDR

The level of learning achievement of grade 4 students in lower secondary schools in Vientiane Capital, Lao PDR was studied. Out of the sample group of 463 students, 44 students which calculated to 9.5% had the level of learning achievement in excellent because they had the score of 9-10, meaning they had scored 90%-100%. 228 students which calculated to 49.2% had the level of learning achievement in good because they had the score of 7-8, meaning they had scored 70%-80%. 175 students which calculated to 37.8% had the level of learning achievement in fair because they had the score of 5-6, meaning they had scored 50%-60%. However, 16 students which

calculated to 3.5% had the level of learning achievement in poor and very poor because they had the score of 1-4, meaning they had scored 10%-40%.

Therefore, by the policy of promotion and repetition of the Ministry of Education and Sport, Lao PDR, 447 students which calculated to 96.5% could be promoted because they had scored 50% and above. Similarly 16 students which calculated to 3.5% repeated in the same grade because they had scored lower than 50%.

When the above result was compared with the internal efficiency indicators of secondary education of the academic year 2011-2012, it was found that there was little difference because in the academic year 2011-2012 the promotion rate of grade 4 students was 91.9%, the repetition rate was 0.9% and the dropout rate was 7.2%.

One of the reasons behind students not being able to be totally successful as expected could be related to poverty. Especially the trend in the rural areas was that the children became laborers for their living so their parents do not see the necessity to learn in the school and are of the opinion that the learning is not important for them. With such parents' viewpoint about the education, it has led the children not to attend to their study which ultimately led to low learning achievement.

The quality of teachers' teaching could be another factor that could be related to students' learning achievement. If teachers were good in teaching and paid attention to students' learning, students would have had the alacrity to study and become successful. On the other hand, if teachers did not have quality teaching skills, and did not pay attention to students' learning, then it was for sure that students would not have had the alacrity to study which could have led to students not achieving high in the learning. It is therefore important to note that the quality of teaching influences parental decisions whether to keep their children in school or not. Teacher attitude is increasingly recognized as a major influence on school dropout patterns.

The findings of this study were very well supported by the document, Education Sector Development Framework, (2009-2015) Vientiane. According to it, the transition rates from lower secondary schools to upper secondary schools were not high in rural areas. Studies frequently noted that girls from ethnic populations were the most disadvantaged in terms of student retention rates. Furthermore, the document

stated that poverty affected the affordability of education through out-of-pocket expenses and opportunity costs related to the socio-economic context and geographical location of each family. Educational quality as measured by examination results is significantly lower in rural areas. Poorer settlements in rural areas perform worse than the poor in urban areas.

5.2 Analysis of the Level of Student's Learning Behavior of Lower Secondary School students in Vientiane Capital, Lao PDR.

From the finding on the level of student's learning behavior of lower secondary school students in Vientiane Capital, Lao PDR it was found that the most number of students' learning behavior was collaborative style. The next learning behavior of the students was the mixed styles such as, dependent style, competitive style, participative style and independent style. The avoidant style was the least used learning style by the students. From the general information of the sample group 85.5% of the students were of the age between 12-15 years, meaning that they were very young group of students. This information indicated that this group of young students might have lacked experiences in the learning, lacked self-confidence to learn alone and independently. Therefore, the learners might have felt the need to seek for knowledge by learning through collaborative style with friends and teachers. Learning through collaborative style would have supported the learners as it was required to share their knowledge with friends and cooperate with teachers. The students were responsible for one another's learning as well as their own. Thus, the success of one student helps other students to be successful. Thus it is in accordance to Vygotsky (1978), who pointed that students are capable of performing at higher intellectual levels when asked to work in collaborative situations than when asked to work individually. Group diversity in terms of knowledge and experience contributes positively to the learning process and Bruner (1985) had contended that cooperative learning methods improve problem-solving strategies because the students are confronted with different interpretations of the given situation. The peer support system makes it possible for the learner to internalize both external knowledge and critical thinking skills and to convert them into tools for intellectual functioning.

Moreover, Slavin (1991) reviewed 67 studies, and 61% of the cooperative-learning classes achieved significantly higher test scores than the traditional classes. He noted that the difference between the more and less effective cooperative-learning classes was that the effective ones stressed group goals and individual accountability.

However, one group of students among the sample group had high level of learning behavior in mixed styles and the reason could be due to the availability of many convenient sources like information from the library and surfing net to extract information which is very convenient for learning. One important source of knowledge could be learning by interacting with friends and teachers of different characters and aptitude. Adopting mixed styles of learning behavior would have helped the learners develop thinking skills and assisted them in analyzing including their participation in shared learning. Exchange of ideas between the teachers and learners will enhance better learning outcome. Teachers' interaction with students would have helped identify students' need and accordingly adjust their teaching style. In accordance with Keefe (1987) no educational program can be successful without paying attention to the personal learning needs of individual student. A single approach to instruction whether traditional or innovative, simply does not do the job. Similarly, Dunn & Dunn (l978) found that using one teaching style or learning style exclusively is not conducive to a successful educational program.

5.3 The Influence of Student's Learning Behavior on Learning Achievement of Lower Secondary School students in Vientiane Capital, Lao PDR.

According to the findings the three styles of predictors for students' learning behavior were namely; Collaborative style, Avoidant style and Independent style where the three variables could jointly predict the learning achievement of lower secondary school students in Vientiane Capital, Lao PDR. The survey indicated a moderate level (0.01) of significance which was equal to 36.5% on student's learning behavior in predicting the learning achievement.

5.3.1 The findings revealed that the collaborative learning style was the factor that could predict students' learning achievement and it had the highest positive influence at the statistically significant alpha level of 0.01 ($\beta = 0.546$). Therefore, it was evident that students who learnt by collaborative learning style will have high learning achievement and on the contrary, the students who do not learn by collaborative learning style will have low learning achievement. The finding of this study was consistent with the previous findings of Ta-Ngam et al (2007) and Mohd Roslan (2001) who found that the students who had collaborative learning style had positive relationship with learning achievement.

The students who learnt by collaborative learning style had positive effect on learning achievement and it can be reiterated that students who adopt collaborative learning style will have the best learning outcome and will have good content if they had shared their knowledge with friends, cooperated with teacher and friends and perceived their classroom as the source of social interaction and learning for acquiring content. On a similar note, Bruffee (1993) stated that collaborative learning is a situation in which two or more people learn or attempt to learn something together. On the other hand, Towns et al (2000) used field notes and survey data to analyze students' attitudes toward group activities in a physical chemistry class. The students viewed the group work as a positive force in their learning, and they also valued the interactions for promoting a sense of community in the classroom.

5.3.2 From the study finding, Avoidant learning style had negative influence on learning achievement with a significance level of 0.01 which explained that students who learnt more by Avoidant learning style will have low learning achievement and on the other hand the students who learnt less by Avoidant learning style will have high learning achievement. This finding was in agreement with the study finding of Soukmongkhon (1990) and Lagampan (1987) who found that the students who adopted Avoidant learning style had negative relationship with learning achievement.

The reasons for avoidant learning style having negative relationship with learning achievement could be due to lack of enthusiasm of students on learning content and attending class. Moreover, they may not be participating and interacting well in classroom and they are uninterested and overwhelmed by what goes on in class

and they simply study to pass the examination. The students mostly remained absent from the class and the fact is confirmed by American Psychiatric Association (2000) who found that the people with avoidant personality disorder tend to describe themselves as ill at ease, anxious, lonely, and generally feel unwanted and isolated from others. Similarly Millon, Theodore; Davis, Roger D. (1996) found that the people with avoidant personality disorder often consider themselves to be socially inept or personally unappealing and avoid social interaction for fear of being ridiculed, humiliated, rejected, or disliked. Avoidant personality disorder is usually noticed in early adulthood. Childhood emotional neglect and peer group rejection (e.g., bullying) are both associated with an increased risk for the development of the avoidant personality disorder.

5.3.3 The findings also showed that Independent learning style had negative influence on learning achievement with a significance level of 0.01. It explained that students who learnt more by Independent learning style will have low learning achievement and the students who learnt less by Independent learning style will have high learning achievement. The finding was contradicted by Soukmongkhon (1990) and Mohd Roslan (2001) who found that the students who adopted Independent learning style had positive relationship with learning achievement.

The reasons for Independent learning style having negative impact on learning achievement could be due to the students' ability to set their own goals. They may be confident in their learning abilities and they may require less direction from the teacher and may be they prefer only the content which is important to them. The students may be target oriented and they may prefer to work alone on course projects. In addition, the reason why the students who learnt by Independent learning style do not succeed in learning achievement may be because 85.5% of the sample group students' age was 12-15 which regarded them as still young. Although the students could learn by Independent learning style, they still needed to learn through cooperative learning with friends through suggestions and support and guidance from teachers.

CHAPTER VI
CONCLUSIONS AND RECOMMENDATIONS

This chapter is to summary the research with a brief introduction research conclusions, findings, and recommendations. The contents of this chapter are presented under the following headings:

6.1 Conclusions

6.2 Recommendations

6.2.1 Recommendations from the research finding

6.2.2 Recommendations for Further studies

6.1 Conclusions

The study of "Influence of student's learning behavior on learning achievement of lower Secondary School students in Vientiane Capital, Lao PDR". This research was a survey research, quantitative method. The sample was 463 students who are study at grade 4 of lower Secondary School students in Vientiane Capital, Lao PDR namely Vientiane complete secondary school, Phonetong lower secondary school, Phiawat complete secondary school, Chomphet lower secondary school, Tanemixay complete secondary school, Sivilay lower secondary school, Namsang complete secondary school and Sangsay lower secondary school. Data was collected by Stratified sampling through questionnaires, Frequency, Mean, Percentage, Standard Deviation and Stepwise multiple regression Analysis were applied as statistical analysis tools. The research results were as following:

6.1.1 General information of students that was the sample found the females sample group had the most number than males (58.5 percent and 41.5 percent respectively). By the most of the sample group had 14-15 years calculated equal to 74.5 percent. When looking to the score found that the most of students had level of

learning achievement was good that calculated equal 228 persons and calculated equal 49.2 percentage.

6.1.2 Number of relatives together with parents found most of the sample group (calculated equal to 46.4 percent) had number of relatives together with parents equal to 3 and above persons. Most of the sample group (calculated equal to 72.3 percent) had high level of father education at below bachelor's degree. Most of sample group (calculated equal to 87.5 percent) had high level of mother education at below bachelor's degree. Most of sample group (calculated equal to 28.7 percent) had occupation of father is government officer. Most of sample group (calculated equal to 45.1 percent) had occupation of mother is Commerce/Personal Profession.

6.1.3 Economic family status of students that was the sample found most of students (37.6 percent) that was the sample had averages monthly incomes of family Not more than 2,000,000 kips. Most of students (57.0 percent) that was the sample had expenditure per day Not more than 10,000 kips.

6.1.4 Student's learning behavior found level of behavior of student's that was the sample by six dimensions from Grasha-Reichmann student learning style 4 aspects such as: Independent style, Collaborative style, Dependent style and Participative style at high level except Avoidant style and Competitive style at Moderate level. Moreover, also found that each student have the learning behavior every styles but different in the much or little level which some students have the learning behavior only one that have most level while some students have the learning behavior many styles that have an equal average in the most level, from the learning behavior as stated found that the student have the learning behavior by collaborative style was most calculated 37.1 percentage and avoidant style was least calculated 1.5 percentage.

6.1.5 The influence of student's learning behavior on learning achievement found at the level of significance 0.01, three independent variables had jointly influence equal to 36.5 percent to the learning achievement that was Collaborative style, Avoidant style and Independent style respectively.

6.2 Recommendations

From the finding of the study, the researcher would like to ask for permission the following recommendations:

6.2.1 Recommendations from the research finding

This result of the research indicated that Collaborative learning style had positive highest influence on learning achievement whilst the Avoidant learning style and the Independent learning style had the negative influence on learning achievement. Therefore, administrators, teachers and parents should cooperate, help, guidance the way for student have good learning achievement rise such as:

6.2.1.1 Recommendations for administrators

The administrators should give each schools organise to meet between teacher and parents guardian of student and student by organise to do the activity together give student have an opportunity to show the good relationship to each other, cooperate in the learning, organise to guidance help student to know self-perception, understand oneself and environment, can adjust oneself to other person very well.

6.2.1.2 Recommendations for teachers

The teachers should create the climate that had be clear in the classroom for making student don’t have anxiety, gives the love and carefulness to student, teacher must plans for the target to give student assignment for the successful, praise, encouragement and acceptance each students, teacher must give the important to all students thoroughly and equality, teacher must patient to misunderstanding and a small error of student, teacher must organises the training skill, give the help and give the discussion to student, make student know that the learning achievement is depend on the ability and the attempt, for the failure occurred from the unattempt teacher should organise the activity of teaching and learning for student work together more than competitive each other.

6.2.1.3 Recommendations for Parents

Parents should love and acceptance to children will make children have feeling that oneself have value, have prestige, have self-confident can be rely on oneself, can self-control, assertive, be curious, have an intuitiveness, parents should look after children very well help every aspects include activity aspect, comment, believe that will impact to student occurred the trust and have stimulus in doing other thing. Parents should respect children's right by giving the equality in the family which will make children have the enthusiasm, have the creativity, know to respect the other's right and know to cooperate with other people as well.

6.2.2 Recommendations for Further studies

This study the Influence of student's learning behavior on learning achievement of lower Secondary School students in Vientiane Capital, Lao PDR. For the students the researcher was study only students at lower secondary school, for the variable the researcher studied only student's learning behavior had influence of learning achievement, for data that showed student's learning achievement in Vientiane Capital had been used internal efficiency indicators such as promotion rate, repetition rate, and dropout rate. thus in the further studies should have:

6.2.2.1 To study Influence of student's learning behavior on learning achievement in the level of other class.

6.2.2.2 To study the other variables such as: parenting style, teacher's teaching behavior that has the influence on learning achievement.

6.2.2.3 Use score of examination of student is instead of an internal efficiency indicator for referring to the student's learning achievement.

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APPENDICES

APPENDIX A
EXPLANATION

Subject: Questionnaire about “Influence of student’s learning behavior on learning achievement of Lower Secondary school students in Vientiane Capital, Lao PDR”

This questionnaire is one part for doing a thesis at Master of Education Management, International Program, Mahidol University. By the objective to study “Influence of student’s learning behavior on learning achievement of Lower Secondary school students in Vientiane Capital, Lao PDR.”

Which expected will useful for Parents’ or guardians’ students, students, teachers, education administrators, related in the Education and who is interested in General.

Your answers have strongly value to the research, the researcher is going to keep the data that received from you confidential, by using for summarize the result of the research, it is only an overview, data that correspond to the fact and completed will help researching progress to accuracy, the researcher is need your help please answer the questionnaires according to your carefully opinion complete every questions.

This questionnaire is divided into 4 parts, have 5 pages

Part 1 The questionnaire data about general information of Students.
It is check- list types, have 4 questions

Part 2 The questionnaire data about Family Status of Students.
It is check- list types, have 4 questions

Part 3 The questionnaire data about Economic family Status of Students
It is check- list types, have 2 questions

Part 4 The questionnaire data about level of action of students to Students' learning behavior. It is rating scale types, have 30 questions.

Thank you for your kindness

Manola MATMANISONE
International program student
Educational Management
Faculty of Graduate Studies
MAHIDOL UNIVERSITY

Questionnaires in the Research

"Influence of student's learning behavior on learning achievement of Lower Secondary school students in Vientiane Capital, Lao PDR"

Part 1 General information of Students

Explanation Please fill up ✓ in ☐ in front of the message that correspond to the fact or fill the message in the space.

1. Gender of students
   ☐ Male ☐ Female
2. Age of student……years
3. Average scores every subject the first term examination of the academic year 2013-2014…….

Part 2 Family Status of Students

Explanation Please fill up ✓ in ☐ in front of the message that correspond to the fact or fill the message in the space.

1. Students have relatives together with parents ……..persons (do not count yourself)
2. High level of father education
   ☐ Illiterate ☐ Primary Education
   ☐ Lower Secondary Education ☐ Upper Secondary Education
   ☐ Vocational Education ☐ Diploma
   ☐ Bachelor's degree ☐ Master Degree
   ☐ Doctor's degree ☐ Others (pleas indicate)……..
3. High level of mother education
   ☐ Illiterate ☐ Primary Education
   ☐ Lower Secondary Education ☐ Upper Secondary Education
   ☐ Vocational Education ☐ Diploma
   ☐ Bachelor's degree ☐ Master Degree
   ☐ Doctor's degree ☐ Others (please indicate)……..

4. Occupation of Student's Father

☐ Government officer ☐ State enterprise

☐ Private Company ☐ Agriculture

☐ worker work as employee ☐ commerce/ Personal Profession

☐ Others (please indicate……..)

5. Occupation of Student's Mother

☐ Government officer ☐ State enterprise

☐ Private Company ☐ Agriculture

☐ worker work as employee ☐ commerce/ Personal Profession

☐ Others (please indicate)……..

Part 3 Economic family status of Students

Explanation Please fill up ✓ in ☐ in front of the message that correspond to the fact

1. Averages monthly incomes of Student's family (Total incomes all Parents)

☐ Less than 2,000,000 Kips ☐ 2,000,000-2,999,999 Kips

☐ 3,000,000-3,999,999 Kips ☐ 4,000,000-4,999,999 Kips

☐ 5,000,000-5,999,999 Kips ☐ 6,000,000 Kips and above

2. Student's expenditure per day

☐ Less than 10,000 Kips ☐ 10,000-19,999 Kips

☐ 20,000-29,999 Kips ☐ 30,000-39,999 Kips

☐ 40,000-49,999 Kips ☐ 50,000 Kips and above

Part 4 Students' learning behavior

Explanation Please fill up ✓ in the answers blank at the end of the contents that you see it is correspond to students' learning behavior most only 1 answer for each questions.

No	Learning behavior	Level of behavior				
		Never (1)	Rarely (2)	Sometimes (3)	Frequently (4)	Most frequently (5)
1.	I would like to make my own decision of what subject matter I should learn.					
2.	I quit attempting to learn in the classroom.					
3.	I feel like a team in the classroom which everyone helps each others.					
4.	Students should be taken care and guided closely by professor.					
5.	I like to compete with others.					
6.	I try to participate in the classroom as much as I can.					
7.	I feel confident to learn by myself					
8.	I study just to complete the program.					
9.	The most important thing of studying in university is to learn how to adjust with others.					
10.	I note whatever the professors lecture.					

No	Learning behavior	Level of behavior				
		Never (1)	Rarely (2)	Sometimes (3)	Frequently (4)	Most frequently (5)
11.	Being a good student in the classroom is very important to me.					
12.	I am willing to complete all of the assignments whether they are interesting or not.					
13.	I search for more information on the interesting issues by my own.					
14.	I am not quite excited for what I have learnt in the classroom.					
15.	I believe learning is a contribution between students and professors.					
16.	I like to learn in a well-organized classroom.					
17.	I try to do my assignment better or faster than others.					
18.	I always complete my assignments in time.					
19.	I like to do assignments and projects alone.					
20.	I am very happy when my professor cancels class.					
21.	I am willing to help my friends whatever they do not quite understand.					
22.	Students should be informed clearly about the subjects taught by professor.					

No	Learning behavior	Level of behavior				
		Never (1)	Rarely (2)	Sometimes (3)	Frequently (4)	Most frequently (5)
23.	I would like to know how well my friends do their assignment.					
24.	I have done all of the professor's assignment whether it is required to do or not.					
25.	When I do not understand something, I will try to clarify by my own first.					
26.	I always chat in the classroom with the friends who sit next to me.					
27.	I like to participate in group activities in the classroom.					
28.	I have done the assignment step by step, follow the professor's instruction					
29.	I would like my professor to appreciate more on my work.					
30.	I always sit in the first row of the classroom.					

APPENDIX B
LIST OF TRULY EXPERTS

1. Dr. Sisouk Vongvichith
   Director General Secondary Education Department, Ministry of Education and Sport, Lao PDR
2. Assoc. Prof. Phanh Champathong
   Deputy Director of Department of Planning and Director of Education and Sport Research Center, Ministry of Education and Sport, Lao PDR

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